

1985

ARIO

Ariv Log Book

1985

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MEDICAL INFO AND MAPS IN BACK OF BOOK.

IMPO
R
T
A
NT

AND BOOZE KIT! !
Bros, the Hut Varden, will put everything
in Dan Ross's satchel; so record wine
& beers in the sack so that the contents
equitably distributed.

(For Boozers)

Chapter the first: In which camp is first erected

In one day, ~~at~~ with mass carry of tents in morning, food + stuff a bit later + ~~personal~~ personal kit in pm. Staying overnight were Dan + Phil H, Salk, Martin, Geoff + William.

Also we stole Sean's Zit tent to bring up now. Thursday am and Dave to sorting out ropes for 1st attempt on TLH with Geoff. Phil + I to sharpen and then head on up to 4/7

Phil + Bill to rig in 3/5. Bill full of noisy chirping Sables this am. We have double burner + gas cylinder but no regulator! Cooked up Babelius carried checker on tiny petrol stove last night, all sitting around moaning about the odd. Tough vino rosado gives only temporary relief.

Oh god, Dave has taken off his trousers!
Salk

NOTE - Desperate need for move Maillons! - None left here!
Also need regulator for gas cylinder.

Dave H. + Paul will be coming up to Arco this evening so save us some food.

Sean H.

Sean came down from Top camp to dump some personal kit. Found my beautiful tent wrongly pitched - re-pitched it. (No I'm not fussing over it too much!) Top camp now has a met station, 1 tent, small amount of cooking/eating gear. No food + no water. Snow levels very low, severe water shortage. Also Fred and I rigged 1st 20m pitch of F20 and went down. We got very wet due to

(2) all the meltwater coming down. Eminently caveable.

Thurs continued. 2-20 pm.

Steve R, Dave H & Martin left to take two promising shafts in area 9, found a way to T-L-J. Shub of gear sub, well do what we can. They look good. Dave & Ceef left kicking rocks into T-L-J, very spectacular.

Thurs just gone 6.

Phil D, Gerhard + Nicola arrived - we've dumped our rucksacs here they're full of gear for Top Camp (ropes + equipment for rigging etc - all written down in Los Cagos log book). Will come back early tomorrow morning to pick up + take to Top Camp. Intend the coming back down on to Base Camp to collect with our own personal caving gear (or at least two of us will); pick up the rigging here + take it to Top Camp; come back down + wait till late afternoon to take up our own personal caving gear from here to Top Camp. Idea being to stay overnight at Top Camp Friday night + come Saturday. Prob stay up Sunday? (seems far away Top Camp but) (or something like this)

Couldn't do this any other way really cos no route from Top Camp till 2-30 pm ish. Richard + co not back yet, Sue successfully did dye tracing imp. sh. + Bond are supposed to be coming up to Aris tonight I think.

Very little water at Top Camp so will have to get cooking very quickly with it. Less than there was at the end of the Exp last year. Can a load of people, or rather some people, do a carry to Top Camp tomorrow (preferably with food!) - not enough people would be here to have got it set up today.

Hope everything going well.

N.D.

P.S. The cats got into the ~~for~~ cooling tent again last night necessitating a morning tidying up. Bloody rucksacs. Wards came - got permit! In SGR's black bag / cows did no damage though.

W

(3)

will bring the regulator and
maillors tomorrow morning
Phil D.
Sues birthday tomorrow.

11.7.85 Tras La Jayada ... Dave R + Geoff. [Geoff ... I felt a lot happier than I
thought I would - just cold, wet
& miserable.]

A very serious proposition, this. I realised just how
serious when testing above the 2nd pitch (as cave is
rigged now) I heard a deep, forbidding rumble - rrrr-
rattt-crash - blin - bang - boom. Spontaneously.

~~Only~~ Only later did I ~~discover~~ discover the
cause: loosely-hanging icebergs on the wall.

There are other mistakes in this ~~and~~ exquisitely
terrifying note. Loose severe slopes by the entrance: there
we gardederred frantically until it became clear that
this route would still be too dangerous for ropes
and humans below. Instead we went over the
edge 25m above in the sunshine to make
a fairly sensational 1st pitch. Next: bolts from
6000 1981 - ground. They took hangers dreamily.
Then a rebelay: a ledge; a Y-rebelay, and
~~icebergs~~ icebergs. Icebergs everywhere, + snow
clinging to them - full of lethal little rocks. I spent
a long time knocking ice off, past another rebelay to
still further ice. Eventually I left the tag hanging
off a bolt and prussiked, chastened, to rejoin
Geoff at the bottom of the 2nd pitch.

(6)

11.7.85

Phil R + Bill S.

Down

3/5

- continuation of the long saga

Trip

got off to a good start

with admiration of the view and homage was

paid to the entrance to this cave. The

care was interesting with lots of tight

squeezes and squeaky spring clicks.

Decided not to verify the bolt which

identified John John S. and soon started

putting of ways. About 25m of / chossy

climbs lead to a walloping pitch

head with one wall of calcite and

one wall of the most horrific choss

in the world. Much finding and actually

lead to a big with a 12m?

pitch leading down cliffs to another pitch

Pleasant drop - 10m? drops post several

ledges to promisingly large choss. However

the Spanish cave was the day -

the way on is an inevitable night visit.

Bill spent an hour trying to stick

up ways he could have invariably

sketch details with bits were not

similar to Quibiz!

Unpleasant exit - left with trouble

to be surveyed.

"Tras La Jayada" doesn't have an "H" in it.

11/7/15

Steve R, Martin

Ferret gear for Dave and Geoff up to TLT, enormous quantities of rope - the one I was carrying wouldn't fit in a sty Troll sack and had to have a coil knotted to the outside. Hot day, and a sweaty walk over. On the way, slightly off the main S/E drag, we paused to rest, and I noticed there was a hole beneath us. 'Aha!' I thought, 'a cave', and sure enough it was. I threw a few rocks down the obvious 'pitch' and then decided to climb down, as I could see an eyelike leading off. The lead down to a small chamber, containing a rock looking exactly like an inflated plastic bag, from a distance. On from this a rift pitch lead down, looking very hopeful. We all had a look at this, and then went out. Took savings on all kinds of stuff, then proceeded to TLT. Incredibly found a large skeleton, which Dave climbed down to 'just in case'. In one corner was a small jagged hole with a couple of jammed ladders in it. Eventually decided we could climb over these, saw a shaft with a snowpile at the bottom. Packed around in a few more holes so these didn't look so good. Dropped gear at TLT and then threw rocks down it. Small rocks made a few bangs and then faded away. We found a large rock and kicked it over. BOOMBANGCRASH.... BOOM! ... bang ... crash ... BANG! ... boom ... crash ... it faded away over 5-6 seconds with no definite conclusion. OOK! The staff ladders descended and had a brief laugh, nearly Dne H.

4/9

5/9

Set off up the hill again around with

(6)

tape and some survey gear. Survey of the bats we
did at the back.

4/9. Descended to previous point then descended a narrow
rift with a short ladder. At the bottom it was found
to be too tight so we had to retreat.

5/9 Promising shaft with a rock bridge at the top from
which the ladder was rigged. At the bottom was a small
snow plug. The way on to the left was a small hole leading
to a minuscule chamber with no way on. Freed the ladder
pitch

6/9 Climb down to snow plug, cross the snow plug
to a 5m pitch rigged from a natural. The small chamber at
the bottom has a narrow rift leading off. The longest section
of this, through which it might be possible to pass, is blocked
by rock which needs a crow bar to shift. This may continue

7/9 15m pitch to bottom of shaft which is filled with
a snow plug which slopes at an angle of 20° to
another shaft which is not open to the surface. The
snow is still very deep here. About $\frac{1}{4}$ the way down
the slope I managed to kick my way down the
side of the snow to find myself in a small rift which
links onto a small, well blocked bedding plane. At this
point we left with the view to dig at the bottom end
of the slope to see if the end shaft went.

12/7 Shaft Bashing. Richard, Steve R, Sara Paul

Could this be the day of the great breakthrough?
We started off enthusiastically skipping along in Ario's debilitating heat and walked first to Xitu, then across the Vega Seca to what Roberts reckoned to be area 8.

"Area 5 is Ario, 7 is over there and 9 is over there" he said, encompassing the mountains in single sweeps of his sweaty hand.

"What happened to Area 6?" Paul asked.

"It's only got one cave - ~~the~~^{1/6} or Ridge Cave, and no-one's ever found Ridge Cave or area 6 again!" hehe...
Wisely, in the heat, we chose not to try.

"This one's draughting!" said Steve, and began pulling rocks out of a tiny, filthy, crevice.

"This is what we have to do this expedition, dig!" We dug, got very filthy, and then tugged off. Up the hill, we made Sara ab down an SIE shaft. It didn't go, but we got well tanned waiting. What next? The biscuits or the wine?

"Let's cook up there" and Steve pointed up a massive mountain of baked rock above us.

At the top - a great discovery. 2/8 and 3/8 - both choked and hopeless. Yes it has: it doesn't go (in 1982) WJS.

"Let's look for 4/8 - it's not been descended -" and we read the incomprehensible accounts of the shaft-bashing trips in area 8 by Jerry. They finished with 'sorry but I'm a bit tiddly' when? Was he tiddly when looking for the caves. Probably. No! WJS

4/8 looked promising and I went on down to find a large supply of boulders waiting to crush me thinner than nyctas. I came up and we ate the biscuits. "Come on Greggo we've got to be resolute about this" said Steve, chinking back into the cave,

(8)

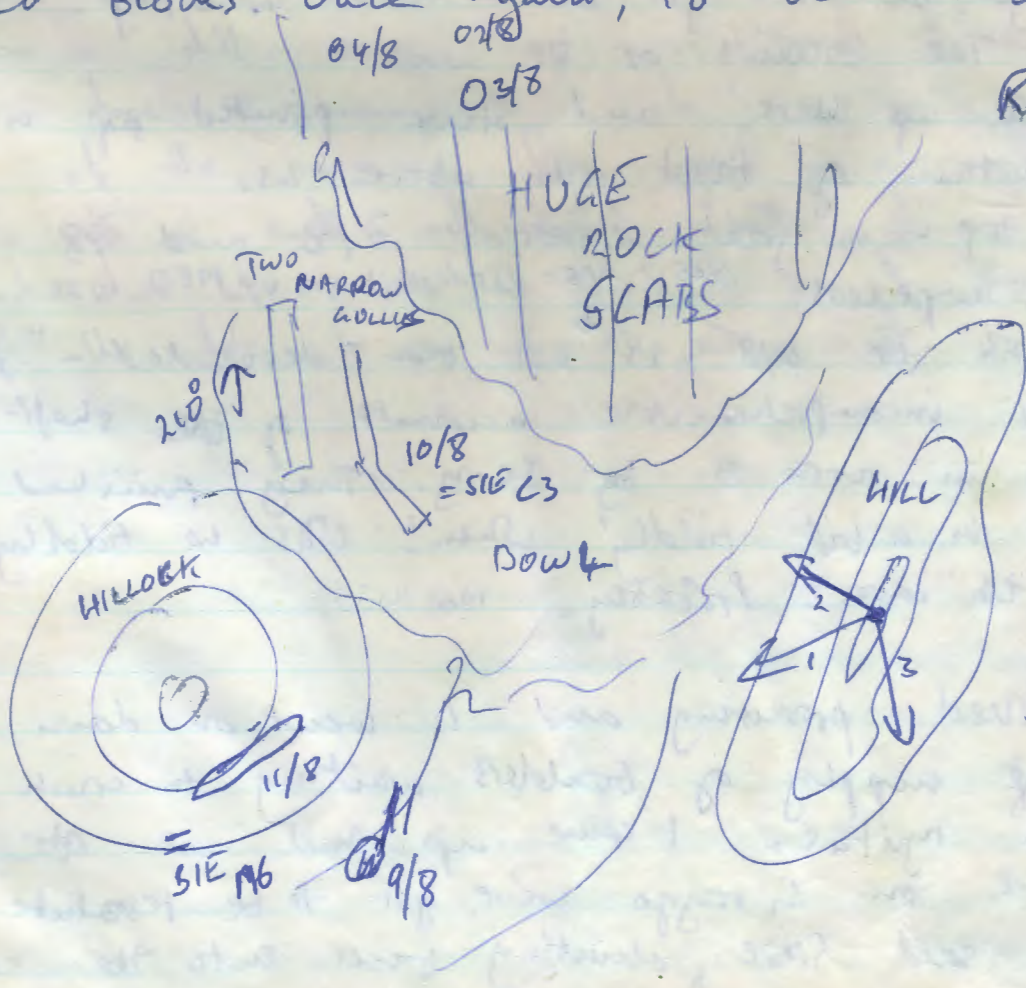
Then he suddenly yelled 'Eugh... you're mad. How did you climb this. Quick give me a line'

At the bottom, we dug like Mendipes at the foot of a cross slope and directly below several armchair-sized boulders hanging by nothing. The secret is not to mention gravity to them. Don't say 'Hey guys we got this wild idea about always falling to the centre of the earth - want to try it?' or anything like it.

It was my turn to dig. 'Shall I kick these through or pass them up Steve? It looks like you would be able to pass this squeegee soon!'

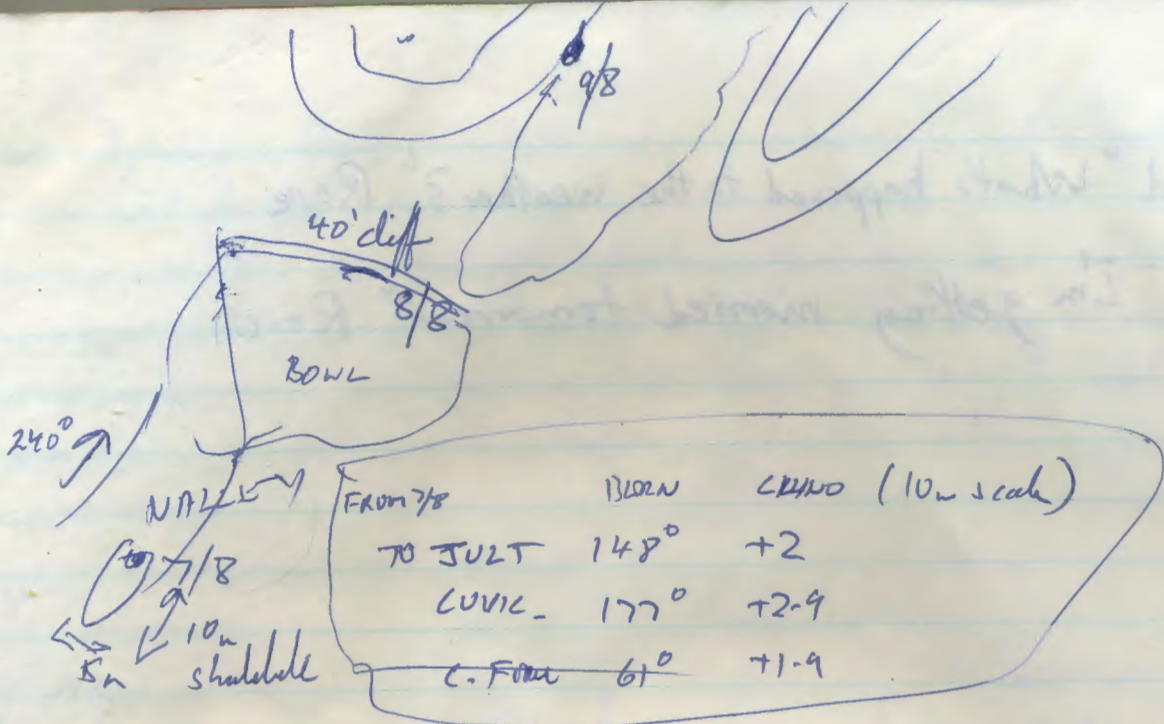
'No, no Richard' Steve replied 'I insist that the honour shall be yours' and he put his boot on my head and forced me down into the tight coneworm. On the other side... just room enough to turn around beneath the delicately poised blocks. Once again, I'd been had.

Richard. G.



- INC
- 1 JOLT. 142° +16
- 2 COLLIE. 171° +25
- 3 C.FORMA 63° +10

On '10m' scale of sills etc in meters



NO PAINT
SO COULDN'T
MARK
THESE.

- 7/8 - A dig at the foot of the end of a stakehole. Not very hopeful - rocks now too big to move except by JLD
- 8/8 - 'Cueva del Dava del Citau' crawl at foot of 40' high cliff into 20' high chamber with sloped left and two sloped upward routes. In the middle of the chamber a big boulder sits 5' up, jammed in the walls.
- 9/8 - Cleft in side of dry valley up and to R. of 8/8 yields a small chamber with small skylights. No way on.
- 10/8 - Marked SIE C3: a cleft has a sharp bend with a 60° pitch in it. No way or wider than 3".
- 11/8 - In Hillcock slightly down slope from 10/8. Unexpected slot, free-climbable down about 40° - no way on.
- 3/8 - Yes, it is blocked.
- 4/8 - A nasty place. Sketched survey over.

Also found in red circled hole on way back, about 1/2 way across Vague S area, but don't bother to find it again. Digging revealed a draft but do go at all.

(12)

David "What's happened to the weather?" Rose

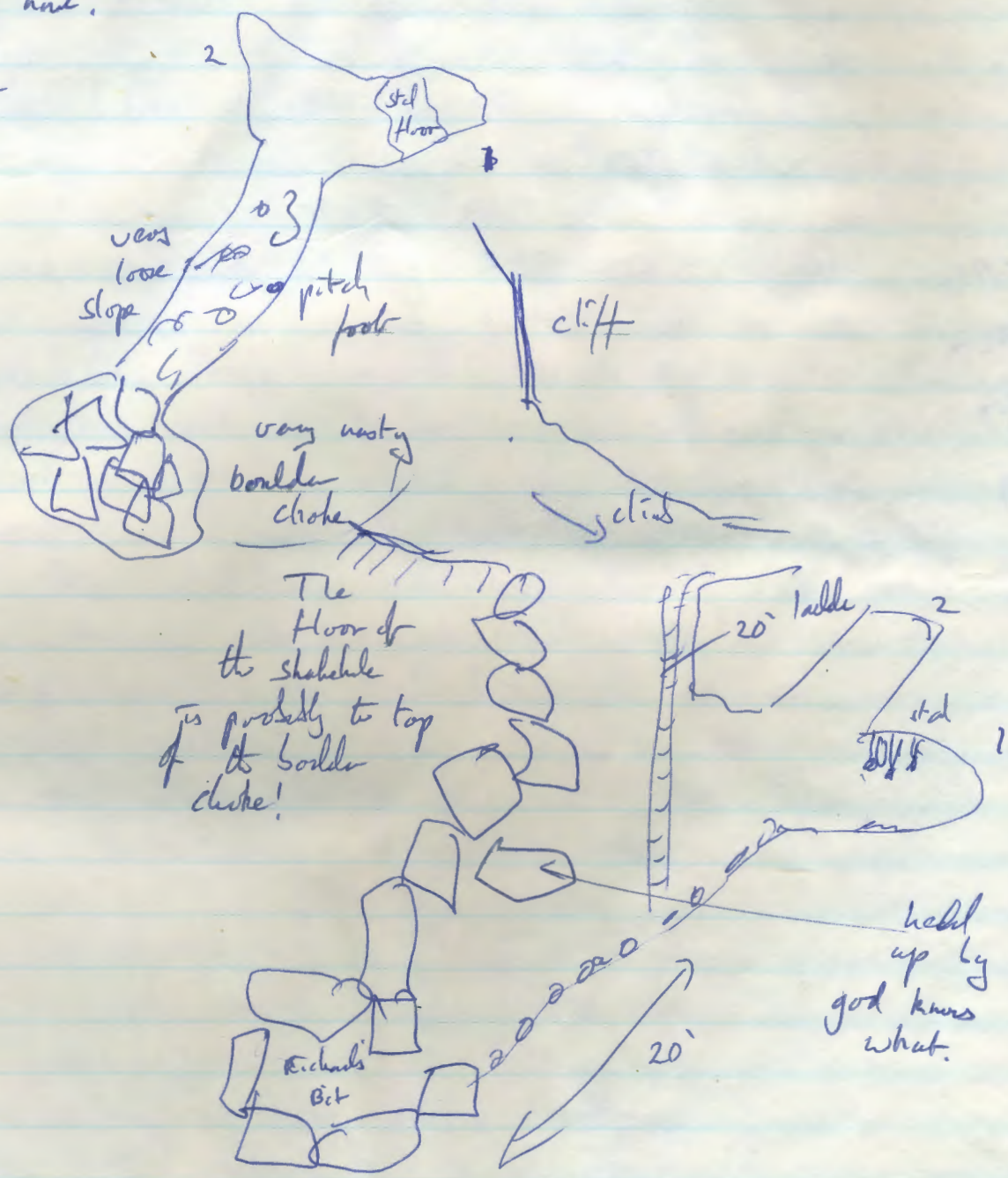
David "I'm getting married tomorrow" Rose

OK
TURNED
TWO
AT

(12)

We passed a cave near the Mirador marked 'OCC' in black, a deep grotto really - couldn't see the bottom. Not clear from PROCs if anyone has gone down, but marked x so I suppose they have.

4/8 -



The floor of the shakehole is probably the top of the boulder choke!

We threw rocks back down it in revenge and fled.

Stal.

THE PLAN

(15)

Could anyone who can make it down to Lagos tonight or tomorrow morning do so - we need a Sig carry up to Top Camp tomorrow evening? S&R, SW, R&, SM have gone down. S&R + SW etc will ship + carry to Top Camp tomorrow. * SM + R& will also do El Hoyo La Madre the day after.
* returning to Ario.

Tras La Jayada.

Fred Phil R. Dave R. 12/7

I got up from Lagos at 10:30. Sunny day, we got things together and tramped off to the entrance where a couple of Spanish women + a man oggled at Dave. We went down a couple of pitches and Phil found his vocation smashing pieces of ice with hammer ~~the~~, and sending them smashing down the huge shaft. He was obviously enjoying himself, as gurgles of delight would echo up the shaft as another chunk of ice crashed down.

We got down to a ledge, and found a small drop off the main shaft into a bit of water. There was a short passage and a drop below a lot of chossy crap. We found a thread, and then discovered their nest & it was

loose, but there was a bit left.
 Did a lot of gardening. Went down and
 and another relay ~~to~~, Totals about
 25m ~ 30m. Down to a ledge made
 the hoodies jammed into the shelf.
 We threw some stuff down some took
 it seemed some took \$ almost 8.

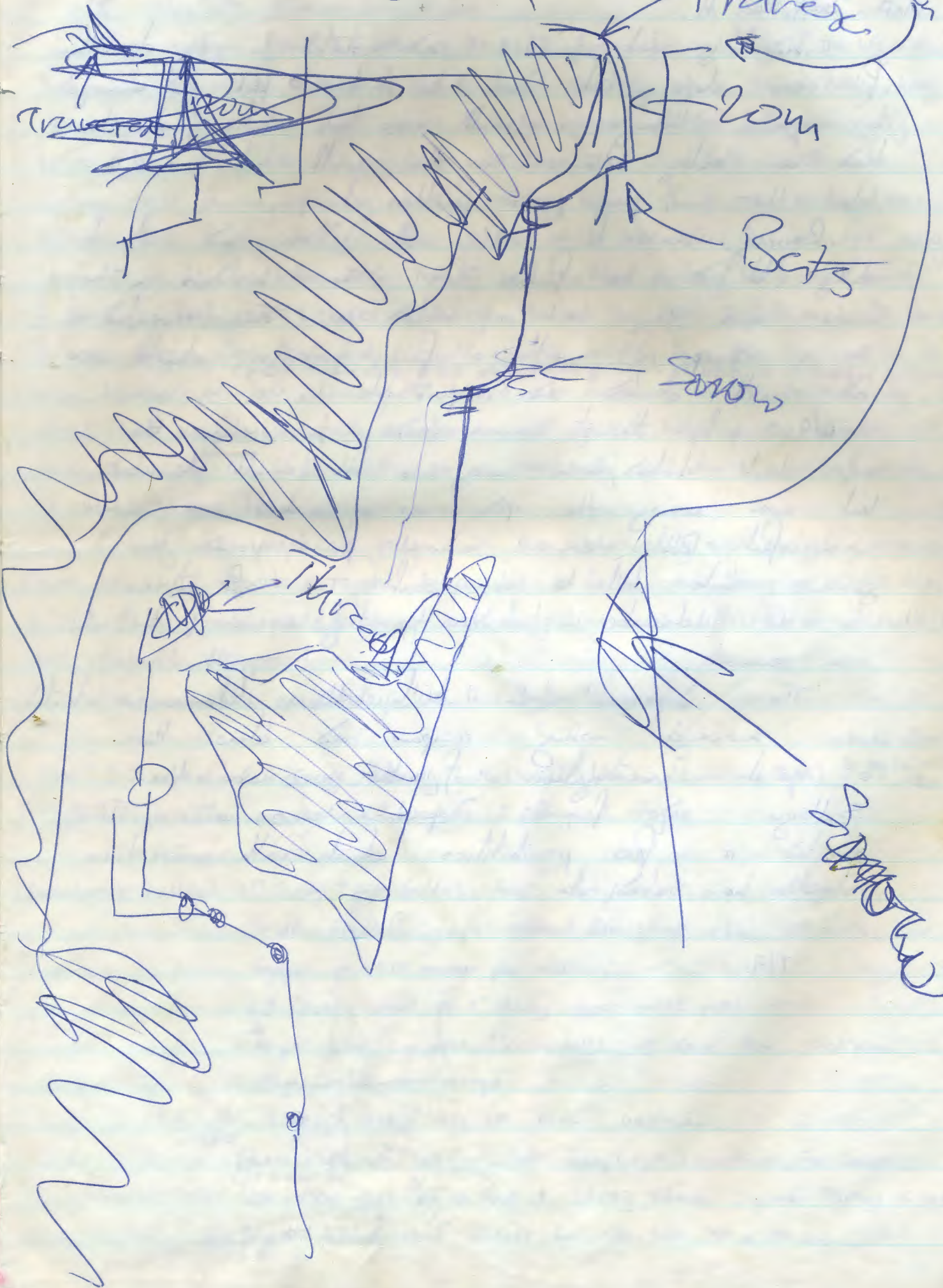
We put in a net trap. A Dave
 put in another 3? ~ 20m down.
 Fred went down ~ 50m and put
 another put in, could sense the
 floor

Got out pretty fast and
 frogged back to camp

There are birds in the
 entrance

Tras la Jajpaa

Spanish Women



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AREA 9 Shaft Base.

Friday 12th

Martin, Geoff, Steve M.

Immediately went to 7/9 and started to dig at bottom of snow slope. Got down to about 10 feet and managed to squeeze through a small snow hole but found this had a rocky bottom. The other small hole down to below the snow plug proved fruitless also.

Crossing over to 6/9 well hidden and almost totally blocked we found 8/9. The boulders in the chock were thrown out or kicked in. This revealed a 30 m deep rift with a few passages which were all well choked and impenetrable

6/9. An attempt was made to remove the rock which blocked the way into the small chamber but even using the opade as a crowbar we were unsuccessful. Rocks were removed from around the jammed rock but to no avail. The ~~of~~ entrance to the chamber looked too tight even if the rock was removed.

The depression in which these holes were situated was surveyed using compass and clinometer. A quick investigation of the area on the Sattaya side of the depression was made. This revealed a few possibilities which with more time should be looked at.

7/9



3/5 Friday 12th William, Dave H, Sue.

Cave surveyed from the bottom of the pitch just before Parting of the Ways then through the bit which William & Phil R found yesterday down several nasty chossy climbs and down two SRT pitches to the chamber at the bottom. Surveying horrible because the rock was very loose and Dave and I didn't want rocks raining down on us, especially when I had my helmet off to take readings, so William had to stay about 3 stations behind us to take notes (this provoked many complaints). At the bottom both Dave H and I tried pushing the rift - I got further in but couldn't make it through the last very tight 2 feet or so. It seems to get bigger after that but I could only see another 4 or 5m. Try Sean or a lump hammer or both. ^{A possible traverse at top of last pitch} doesn't go and is all calcite so no chance of re-rigging. Coming out turned into a bit of an epic because by about half way I was pretty knackered and needed help up the climbs and tying up the 25 ft ladder so we eventually had an 11 hour trip which it shouldn't have been.

If many more people are going down, the pitches really need re-rigging because there are a lot of rubs. It might be possible to do the whole thing on ladders. Also a lot of the climbs need gardening and are getting more difficult as handholds and footholds disappear!

I've never had a birthday like this before!

SCR.

I was referring to my helmet! SCR

Sue "I'd rather have it off, actually" Robicette. (In last chamber of 3/5)

Geoff "Maybe I'm not such a hunk as I thought" Hogan

Location of Tackle: 1st pitch (25ft ladder) has ^{SRT} rope for 2nd pitch as lifeline. Could profitably rope exposed 6m climb above 2nd pitch, our hanger in SIE anchor for this.

2nd pitch rope & 2° belay now on 1st pitch.

Might rig 4m pitch (ladder, bolt) just above Non Deficiam.

~~Just really to rig~~

Empty tackle bag at Non Deficiam.

Tackle bag with bolt kit, bolts, hangers, ≈ 4 mailbags, 5m ladder &

10m rope at top of foot of chossy climbs beyond Parting of the Ways.

A full tube of spent carbide has also been left in the bag.

(17)

13/7

We're probably the only people in the world missing
Line A.D.

Richard + Sara on Grand Tour of the Picos. Wakened by the
tent falling on us at Lagos, visited Cargas, the beach,
Puente Romane (and Rio Grande), Top Camp, Tres la Hayada
and Ario.

Am writing this to record a very 'cavey' looking hole with no
marks on it ~ 400m away from Tres la Hayada on a
bearing of 280° . Also 60° from hole (9/9) is Ario, 120° to
Tultayo + ~~to~~ 160° to Cuvicente. 2 cairns built.

13.7. DaveR, PhilR, Fred. TLa Jayada. (by DR)

Woke up feeling poorly: cumbres de grados by the litre on an
empty stomach after caving a bad idea. Had a remarkably powerful
and voluminous shit: not voluminous enough as felt like doing
a repeat during most of the trip, a particularly uncomfortable
feeling when somewhere in the darkness clinging to the
wall with only rebelayes and nothing to stand on for
100m in each direction.

We descended rapidly to last night's bolt and Phil carried
on down. There was the old ledge in which further
bolts (later by Fred) were placed; at some indefinable
point in nothingness we changed the rope and started
pulling further lengths of strong pasta from a
different yellow sack. The daylight was far out of
sight. The stream falling from one snow-plug now
high above on the opposite side hissed menacingly.
At last Phil and I (we'd been on the ledge for 3 hours
by this time) heard Fred's distant instruction:
"come-on-downnnn" ... Further attempts at
communication were lost in the echo.

Fred had got himself a little niche leading
to a rift trending away from the shaft. He

was not at the bottom. We joined him. The rift behind was fossil-looking; dry + popcorn-covered. Rocks fell down it for a long time.

Back in the shaft bolting was impossible. I chipped and scraped at wet, crystalline stuff that shattered on the first few whacks, the rope above tramping ominously on a nub-point lost in the blackness upwards. (This hang was about 70 m.) What I need, I thought, is a nice thread. Some ~~at~~ fat chance. ~~But~~ But no: it was there two feet above me. The others slid a wire along the rope leading to the niche and I rigged on down.

Henry V died from gangrenous pits aggravated by eight days in the saddle. No doubt one could catch something nearly as unpleasant from hours in a Petzl Rappel but this time I hit terra firma: a proper ledge (undippable from the rope on) about 10m from the bottom. At the back was a bridge and a window into another shaft... much deeper than the booming rocks I cast into it... E! Exit! Success!! The way out!! "Rope Free! I found the third system!" Phil's excitement was as great and by the time Fred arrived we were whooping and dancing about; La Jayadet had been cracked, the SIE really shown up this time...

We went to the bottom for form's sake and duly marvelled. A flat-floored neat black mostly invisible cathedral, dulled by the snow-water ending its hissing in a deep, clear pool. The SIE's little continuation was noticed and like the shaft floored by dense, impenetrable chok. Inside the Cathedral were lumps of moss and wild thyme we'd knocked off coming down the entrance pits, the only sign that this hole was open to the sunlight. But we didn't hang about; exploration on the mind. Only 3 bolts and 2 wedges

(20)

but we'd make them good ones...

The first went into the top of E1 Exido ~~and~~ through the window; the second Φ 4m down for a rebelay. Suddenly it didn't seem as deep as before: I could see the bottom. Hope still high as I returned down into a curving canyon.

The floor was loose, steeply descending. I advanced gingerly: another pitch must be very close. A small climb, then it ~~fell~~ flattened out. The floor turned into hard mud. A dead end: only an aven, bearing a tiny inlet. Fucked.

We tried a few other things like Fred doing crazy pendules into a space between some boulders but there was no way on. ~~Time~~ Time for bed.

We were all on the surface by 11:45: drenched by only our own sweat. The rebelay got steadily more strenuous, the monotony of the endless PMI disappearing into darkness more intense. The last pitch of all was hardest: suddenly buffeted by a warm wind, the stiff Marlow wouldn't come out of the ~~roll~~ ^{roll} for the last changeover 2m from the top...

That's speleology. A magnificent shaft, nonetheless. And somewhere here is the third system...

He kicked off some snow under the upper plug and got very frightened indeed of the whole dirty-white thing coming down. The 2nd pitch is done without a rebelay by threading the rope through the side of the 1st plug from its top.

Sunday 16th.
 Shaft path of area 9
 Confident of my route finding I plough off into the mist
 with the following. Knowing exactly where I wasn't
 I found the entrance to 22/15, great lets try a
 direction change to relocate the route. Tump Tump - ah!
 were on the route to top camp. With the still following
 we head back to arid taking photos of the mist
 as we go. The only benefit is we got back for
 lunch - yum! (11³⁰ - 1^{pm})

Chapter the 2nd. Set out again at 2^{pm} with the clouds even lower,
 this time trying to follow compass bearings. Martin proved an excellent navigator
 after 1/2 an hour we stumbled across 4/9 and soon after that saw the rope
 hanging down TLJ. Following Richard's 280° uphill & Martin located 9/9
 while I had a bit of sleep in the mist. The shaft looks very promising indeed
 but: there is an "SIE O" red point mark on it (to which we added "9/9"
 etc.) and there is no way on beyond the 2nd snow plug (why have the
 SIE not managed to bottom it??). Rigged the 60m rope ~~to~~ to naturals
 with 1 tector & 2 prusik-bags to avoid rubbing and Martin went down at
 4^{pm} to emerge an hour later, having pushed about every corner and got snowed
 under heavily. I followed it up with a 1/2 hr trip, very refreshing.

Couldn't do any reasonable
 surveying 'cos no mountain
 tops at all visible. Sorry, we
 also forgot to look at our
 compasses to find out which
 side of 9/9 is which. -
 Went back a long way round
 via 5/5 and 21/5 (the easy
 shortcut through Sou la Cistra),
 hit the Trea path just below it
 (with rucksacks in it) and
 were back in camp gon-ish.



Left the rope for someone to do a Grade 5 survey...

Sunday 14th July 3/5 Pozo de los Carabotes Dave H. & William; Sean & Geoff

Two parties ^{of small caves} set off down 3/5, one to push each of the right rifts at the bottom, ~~of 3/1~~ Dave H. & William set off for Wingnut's rift, whereas Sean & Geoff went into Birthday rift. Watched by some Spaniards while changing a men set off. Rerigged 2nd pitch, putting a rope on the climb above it & then uneventful progress down to the Parting of the Ways, where the parties parted. Rigger the pitch down to Wingnut's rift on a ladder, sling & Dave's & my donkeys dicks owing to the lack of long wire belays. Dave & I went through the first rift & found two possible ways on: one was a scutshoulder running back under the original direction & the other was a rather tight rift emerging above a 30 foot drop. Dave failed to get through in a sit harness but I struggled through minus my sit harness & hunk on by my eyelids at one far end. A reasonably easy climb down to a sizeable chamber with a small dry streamway with suit-sliding flakes & a fragment of a park of planters. Wingnut was here. I'm impressed. Went back for the Humphammer & removed an awkward flake to see a nasty-looking route down & a small window, also full of flakes..... a large pitch with a 2 1/2 second drop & good limestone for bolting. "!!!"

Went back to Dave & then we decided to find the other & then either detackle Spectacle Series if nothing had gone or go out if it had. Went ~~back~~ so Dave hadn't expected to go down the climb again so soon & we met the others a bit by the pitches ~~they~~ detackled the pitches & the Geoff & Sean went out while Dave & I rerigged the ladder pitch. Exited 9:15 pm. Must go back tomorrow to rig this pitch!

From 'Parting of the ways' team then man (Sean & Geoff) negotiated the several chossy climbs down to (at this point Geoff was distracted by breakfast and Sean takes over...) the nasty pitchheads. Eventually struggled to Birthday rift. I went in first and thought so-er. Faint hints of claustrophobia hit me. It looked too dark to make out much. Geoff went in next and got in a bit further and put a light in place. He could see no way on. I reluctantly went in for a look and agreed there was no way.

We were both very impressed with Sue's efforts - she probably got in further than we did. Anyway, we desigged this blind route on the way out, leaving plenty of tackle for further pushing in other direction.

Monday 15th July 3/5 Geoff + Sue

We went down to ng and push Winguat's rift after copious instructions from William and Dave over breakfast. Got through the rift OK except that Geoff insisted on going down the hole in the middle which we were told not to do! Found the 30ft climb and put a ladder on it because (like Dave) I didn't like the look of it - well, the top bit anyway. Emerged in a chamber, wriggled through a streamway with razor-sharp edges of rock all over the place then found ourselves over the 2 1/2 second ^{drop} pitch. Geoff rigged it on naturals and we struggled through the small hole, took a long time to clip onto the rope due to lack of space, but finally absided down a huge shaft - the character of the ~~shaft~~ ^{cave} changes completely. At the bottom there is a winding rift (not too tight but the bottom drops away - not easy to free climb. Geoff nearly hung himself by his helmet going down.) After about 10 ft the floor disappears and there is another big black hole with a 3 1/2 second drop! We go! We turned around at this point due to lack of rope and made our way out rather slowly (due to tiredness on my part) but uneventfully except for struggles at the top of the 30m pitch which is a very awkward take-off. A 12 1/2 hour trip, we emerged at about 1.25 am in thick mist and had fun finding our way back, finding and losing yellow spots and cairns all over the place. Finally found camp by seeing Fred's light approaching from the other direction, had lots to eat which we really needed and fell into bed, after a few problems finding enough spare sleeping space since Richard, Sara and Steve M had come up from Logos.

P.S. ~~Had~~ Two-thirds of the way down the 30m pitch is a big ledge from which there may be a way on but Geoff doesn't think so.

(24)

Sunday 16/7.

Think good for + James at F20
with pitches + water is plenty
But we haven't a hope
without a long rope -
it's already cien metros cinquate!

Detalle TLH! Don F20 Ees se bas near!

SN-

Monday 15th Tras la Jayada

Fred Sean Martin M.

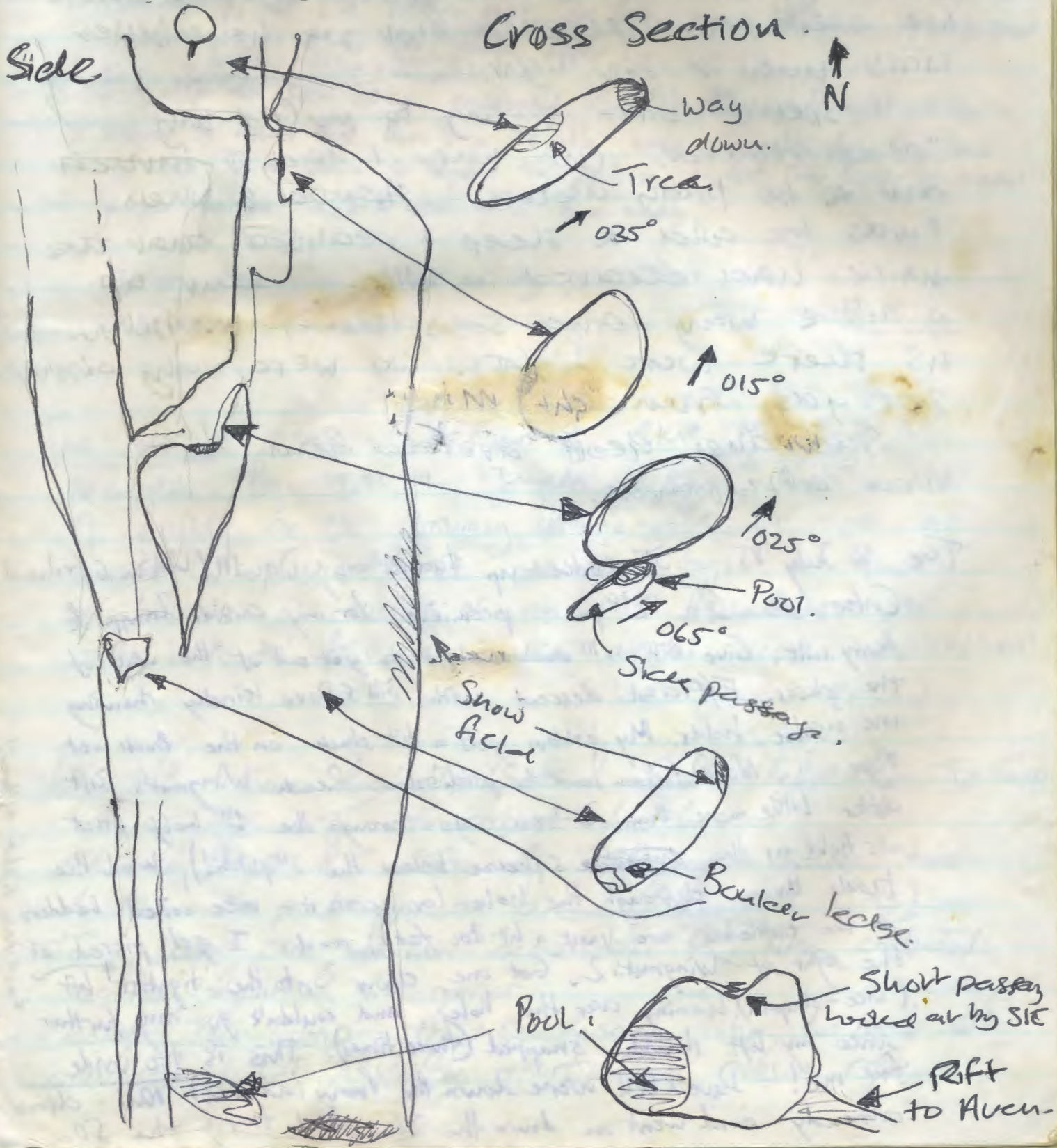
I got up from Lagos at ~1000
We set off in slight mist to the cave
and found it after a bit of scouting
around. We got toggled up and abbed
down to the bottom. Sean saw something
that might remotely be a way on. We
both tried to climb up to it, then I tried
standing on Sean's head, but no go.
We chucked a few stones up to it, and
decided that it was not worth bolting
up there.

I went up to the rift that I had found
on Saturday and rigged it so that
the others could get up too. We rigged
a traverse line and then stuck in
a couple of bolts as far along the rift
as we could. We knotted the 20m and
30m ropes together, and I went

down. I had a lot of hassle getting ~~my~~ passed the knot as I couldn't get my chest ascender at the rope.

Eventually I got to the bottom of the rope. Although I wasn't at the bottom of the pitch, it was obvious that we were in the same area as we had got to before.

Cross Section.



(60)

We hauled ourselves out to find the mist had come down, and you could see about 10 ft. We set off walking along a hearing ~~st~~ stumbling blindly through the damp mist over & slippy rocks, attempting to go in a straight line. Eventually we realised that we didn't have a clue where we were, and decided that we had better wait until it got light.

I spent hours trying to unbold my space blanket, and when I had it furled out to be pretty useless. Around 2 when I was too cold to sleep I realised that the mist had cleared a little. I went up a little way and saw that just below us there were lights. We were only about 200 yds from camp.

Sue and Geoff arrived from 3/5 soon afterwards.

The 16 July '85 - 3/5 coded up tourist trip; David H & William & Bernhard Enter/around 12²⁰ pm: premiere for my carbide lamp & funny suit. Give Bill 70 minutes start to get out of the way of the choss. Efficient descent, with Bill & Dave kindly showing me usable holds. My bobbin gets a bit stuck on the thick wet rope in Non Deficiency and the pitch below. Reach Wingnut's Raft after little more than 2 hours, go through the 2nd half (not as tight as the ~~one~~ squeeze below the 1st pitch!), haul the tackle down through the hole (or across it - nice coiled ladders in the tackle bag are just a bit too fat), and - I get pissed at the sight of Wingnut's 2. Got one elbow onto the tightest ^{bit} (vice-shaped) leaning over the holes and couldn't go any further since my left shoulder snapped (three times). This is too wide for me! - Dave & Bill were down the (now laddered) 10m - climb already and went on down the 20m pitch to rig the 50m

*not very tight either!

Unfortunately the 5pts container supposed to contain the bolts contained ⁽²⁷⁾ carbide! So much for pushing on. 5 hrs after we had entered (and I having waited in the little chamber in the middle of Winyunt's) we started the way out. Again very efficient (with a calamares - & carbide-sort out break), I fell off only twice (into my coustail at the head of Non Deficiam and into my arms on one of the climbs - i.e. stopped myself each time) and we emerged into grey daylight about 8:20 pm. Left the 1st pitch with a self-liming rope.

Fine cave (what regards the architecture and the colours of the rock), but I'd rather not do this again ^{with} this rigging (not that one could do it very much safer).

P.S. ^{I (w.s.s.) - (a Dave inadvertently)} did some noisy gardening at Skittle Alley. - It might also be useful to know that there is a reliable voice connection from the head of the 1st pitch down to beyond the squeeze, so that entry / exit of several people can be timed & coordinated more easily.

Total abortion I feel sorry for Dave who's had to go down. The bottom pitches are great though. Willieain

Tue 16th. Sara w. Richard G Steve M Dave R
descended Poju Tras La Jayada. Sara had a bit of trouble on the bouncy change-overs but we all smoothly (!) pussicked out with the bags to find the hillside as murky as an M15 Press Release, so came back to Anio, where there are at least no telephones. Richard.

Wed. 17th Sara, Richard, Dave & Steve leave for Top Camp via Tras La J. to collect tackle. Steve & Dave R. return to 2nd camp - Steve back to Anio to pick-up a tent (Richard & Saras) so Top Camp can also now accommodate 6. Also collected coffee, stout & tin-opener. Plan for Top Camp - Rich. + Sara descend today, to sort out confused verbal & written reports with 50m rope.

(26)

Date + Steve - descend on Thur. with more tackle,

If 2 people come up on Thursday can they collect any remaining tackle from Tras la J. & bring up a selection of food.

Can somebody going down to Lagos & Thursday carry the extra bolt kit down so that La Haya de Madre can be 'pushed' at the weekend,

Thanks Steve.

P.S. I can't find the bolt kit - has it already gone to Los Lagos?

P.P.S. 9/9 has also been defogged and R.G. has confirmed that it is identical with his shaft.

Wed 17th July. Went up to the Refugio to fetch water at 10³⁰. There was a long queue and the spring ~~was~~ reduced to about 1L in 3 minutes so it took me ~~two~~ bloody hours to get one container full. Came back to find the camp vacated and taken over by sheep sticking their heads into the kitchen tent. They're getting a bit bold lately. Decided not to go down to Lagos until somebody else had arrived.
Moral: 1) Go to the spring at 6^{am} and/or 4^{pm} and/or 10^{pm} and you ~~get~~ ^{stand} a fair chance of finding a full bucket.
2) Obey Expedition Policy and keep And (w) manned at all times.

G.W.

Wed 17th The trip to 'Finish Off' 3/5.
Fred, Phil R and Bill.

I woke up on Thursday with my heels strangely stiff my body feeling like it had been dragged through an maple bark road. The mystery to this credit in deepened when my and onesits were examined and had to be ripped sheds. There had been new ~~to~~ a week ago! What had happened the day to come all this stuffy. Gradually, ~~recovered~~ revived by coffee

at manifest numerous of the trip returned.
 The list put had been ok, we had
 no trouble and I had been down to the putting
 of the ways before. Then came the list honor
 , Wingnut's rift. After its dramatization the day
 before this seemed quite easy and was more
 do soon down the ladder climb on the other side.

The squeeze onto the pitch head began
 saw a forecast of trouble to come. What
 would it be like on the way back? However
 the shift was fine and we were soon
 at the top of limit of exploration at a
 the top of a pitch in a wide rift.
 Xiku was certain to be at the bottom!

As Bill had pushed most of the cave we
 felt he should have the honor of finishing
 the cave and ^{he} was soon disappearing into the
 depths & accompanied by musical (!) vestibular
 by Me + Fred.

At the bottom (the pitch is a fine 45m
 free hang) Bill was captured "It's just like
 the Tonesa scene" Gunt Gunt "I'm sure I've been
 here before! But no, God, Hell I don't. You
 means it NOT Xiku "Gunt, Gunt" Its delicately not,
 Oh Hell this for rift took awful". Tired
 by Fred + I his sing Bill's original
 opinion about the rift was called, a real
 matter. However Fred was undated by
 Hules chess quite needs and the gradual
 red rock of the area of his oversights
 and accompanied by the change of humor
 on whole he gradually progressed inch
 by inch. Flat at in the stream, up into

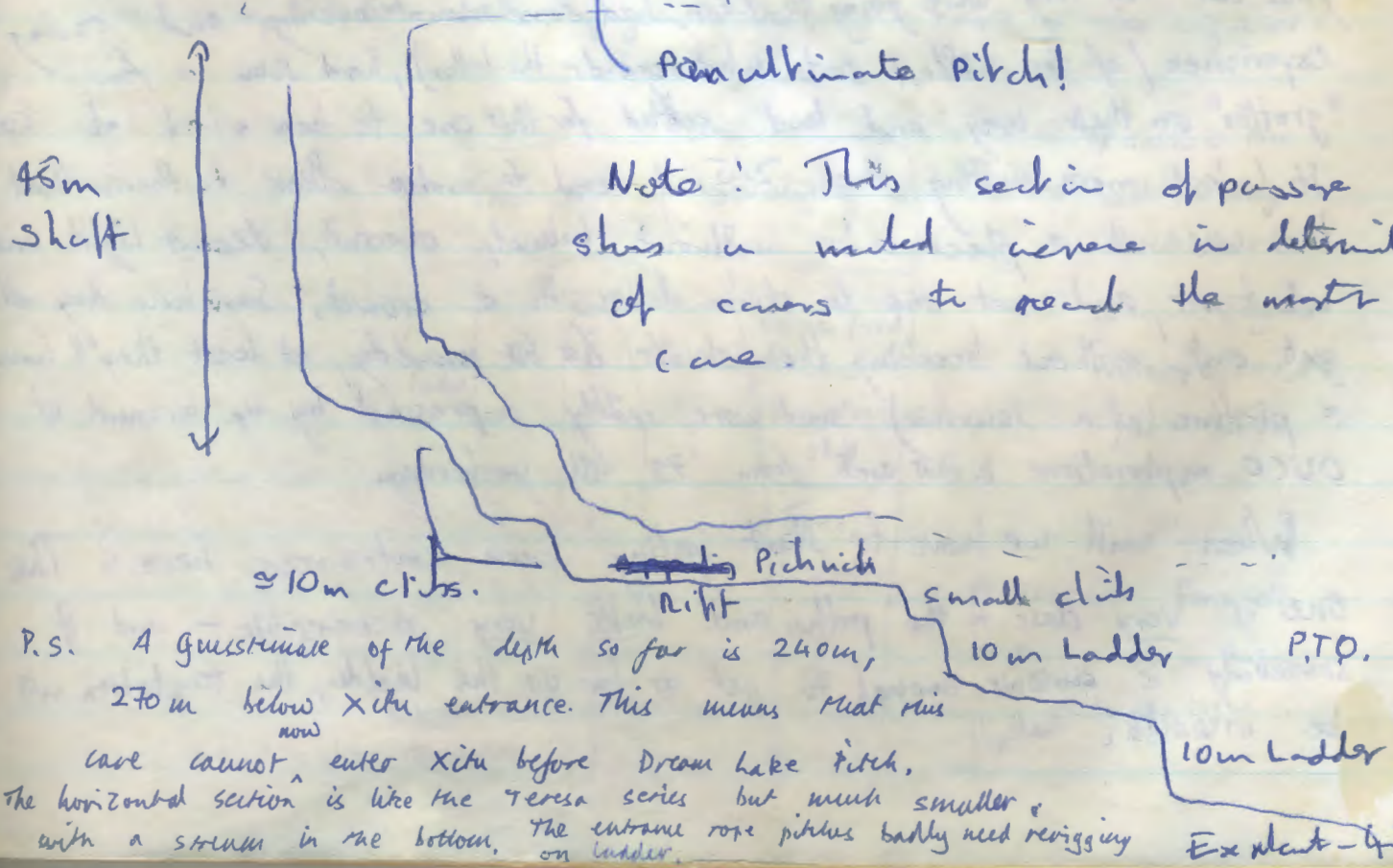
a wider bit and then that out is
a semi-vertical of the cliffs in Brown
Hill port where the trench is just wide
enough to trap a radde bag. Then
Eureka! it indeed, there was a
climb and a pitch down.

We returned and with taller
bags (no easy heat, here the
with became Pichnich Rift). The pitch
was a very appalling to rig, the rock
was mostly unusable for both in
with one off as soon as any
pressure was applied. Bill had to be
caught coming the climb when his foot
held decided to go for a walk. Eventually
a 5m pit ladder pitch was rigged
down to a ledge with short climb below.

Further awkward strenuous leads to
another pitch (10m ladder - this time
easily rigged from ^{so} natural). This
again leads to ³ ~~two~~ ^{so} team of awkward
shown with another pitch, again about
10m and suitable for a ladder. We
only had a 30m rope so decided
to call it a day and make our
heavy way out (it was also some 4pm!).

My legs about the way out
were slightly allayed by a
very rocky smooth passage through
Pichnich Rift and the ~~rather~~ good
promising at up the long pitches.
However the take off finally put paid
to all this delusion of ease.

Suddenly I managed to get my feet into the tiny hole at the top which was the way in but the rest of my body wouldn't budge. There I was my torso & overhanging a 30m pitch, trapped for a good half an hour by my sit bones trapped over a appalling spike. The thickly encrusted pit of which I made it to the bottom of which with all was able to calmly enjoy the guff & curses of my companions as they went through a similar hell! Our trully visit quite over, my welly had a terminaly skid in Wigult's with, but somehow we managed to drag ourselves to the surface without further incident. No wonder my brain had tried to erase the memory of the night before!



(27)

~~Some tape & Engineer's log & pencil +~~

R.P.S. ~~We left the ~~Surveying gear~~ by the start of Weingut's rift near the last
Survey station~~

P.P.S. We left the ~~some~~ tape & the Engineer's log complete with pencil & penmarker by the start of Weingut's rift. The last 1983 survey station is neatly marked with $\begin{matrix} S \\ \cdot \\ \wedge \end{matrix}$. Compass & clinometer were taken out

Thu 18 July: Jutajin (Gerhard) 130-145 pm

Following the orange (as opposed to yellow) marks and then the cairns and the reasonably obvious path I had no trouble finding my way to the top. Fell victim to a severe optical illusion since I'm used to mountain-crosses of the Bavarian/Austrian/Italian kind, i.e. 3-5m tall. Nice view, but wrong time of the day for looking back to our caving area: the sun is right in one's back and there are no shadows to bring out the ~~relief~~ relief. Could make out the (microfault?) strip marking the line of Xitu's upper half, though. Gave me a shudder of awe.

Came back and passed 3/S entrance at 3:00 pm to have an encounter of the 4th kind. A group of 9 ^{young} Spaniards (4 ♀ + 5 ♂), apparently an equivalent to "Happy Wanderers", were ~~spread~~ spread out: (a) along the path, (b) above the entrance drop, (c) inside this, (d) in Skittle Alley, (e) at the foot (!!!) of our ladders. Tried hard and remembered enough of my French to find out that they were going to Cain, had some mountaineering and caving experience (of the mildest sort what regards the latter), had seen a few "grottes" on their way and had settled for this one to have a look at 'cos it looked more inviting than 2/S and to make clear to them that this was not a place to be without helmet, overcoat, decent light and what not, and not one to storm down in a crowd. Somehow they all got out without breaking their skulls (a bit windy, at least they'll have a picture as a souvenir) and were mildly impressed by my account of O.U.C.C. explorations in this area from '79 till yesterday.

When will we have to start getting cave entrances here? This one is very close to the path and looks very accessible - and if somebody is curious enough to get as far as the ladder, the temptation will be irresistible.

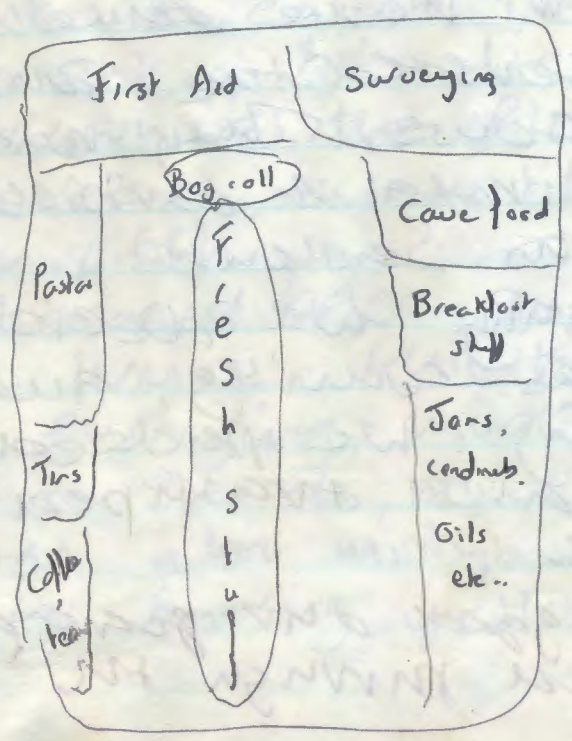
17.19.85

Phil + Fred have gone to pick
 3/5 as you lazy buggers hadn't tried
 up from base yet! You should
 do a survey? Survey trip. Tape + captions
 log are at the limit of survey before
 Wingwatts Rift. Cook us a good dinner
 if you don't go down!
 Dave Rose - your donut
 top is in the zit. Bolt driver is
 just outside + zit, ↑

S&R, Martin M + N.D. all stayed at Ario overnight on route to Top Camp - S&R + M off mega
 early to go caving today. N.D. intending going up later when mist/fog rises (can't see a bloody thing
 at the mo) Until then I'll be tidying up camp-site up. What happened to all those people
 wanting to come today who were at Lagos yesterday?

If anyone goes down to Lagos can they take the bolt driver please?

Steve M. arrived 12.30 ish. Now too hot to go anywhere... Cleared up,
 going up to Top Camp late afternoon with intention of caving for a day or two
 + then coming back down with my gear to Ario. Food tent now organised ish



Doubtless this will not stay like this but it was a vague attempt, so's I'd feel useful...

Plates + mugs + w/c flysheet.
 Pans etc. in huge billy.

The Trip That Did Finish off 3/5

Fred + Phil R

19/7/85.

~~There were fa~~

During the night the cows came down to camp again, and the night was frequented by the sunnels & cows burping violently.

At crack of dawn there ~~were~~ were muffled sunnels & Steve and Martin leaving. Several hours later I woke up, with Nicola beside me looking like something, at 'Scott and the Antarctic', wrapped up in a heavy suit, two jerseys and a fibre pile, as she didn't have a sleeping bag.

We got up and hung around to see if anyone was coming up from Lago. but noone came. ~~and~~ we also discovered the source of the burping cows. They had taken a large meal of caribou, washed down with Sewton.

Eventually we decided that noone was coming, and we could go pushing. We packed up tons of gear and tramped over to the cave.

We lugged our gear down the cave, and through the 'Picnic'

on the way my one piece overalls progressed rapidly towards a two piece, with detachable trousers

We rigged a ladder on the pitch we had got down to before, and went down ~ 10m into a small chamber similar to the ones before.

At the end was a short climb down to a much bigger pitch. We rigged a line down to the ledge on a natural, and another couple of rebays to give a brace hang. I started down, and it was clear that I was emerging into a very big chamber, full of huge boulders.

I got down onto a very big ledge with a lot of very big boulders and ~~the~~ loose scree. Phil came down, and we soon spotted a fall tale pile of carbide. We were in X.m.

We found some truly appalling ~~rocks~~ bolts, put into calcite veins, and sticking out a bit. We rigged a pitch down to the floor and wandered round till we got to another pitch.

We headed back and made it out in 2 1/2 hours. Phil took a picture of me emerging, muddy, grinning, ripped to shreds and knackered.

It was a bit misty and we had trouble finding yellow spots.

'Sod the path!' said Phil and struck out into the unknown.

Anapurna eat your heart out. we sealed some epic tracks, and soon realised that we hadn't a clue where we were. Suddenly the fog was much thicker.

I got out the compass, and made a rough guess. A while later we had descended at the Mirador!

'I could find my way back from the mirador with my eyes shut.' said Phil, and 5 minutes later we had lost the path, and were wandingly blindly in the mist again.

A while later I found a sign saying Trea. we were back on the path to 3/5 again.

Needless to say we got lost again but after a lot more tramping about my whistle blasts were answered by shouting from Geoff. Was he still base camp? No! Amazing we were back at camp.

Seen "I'm so neurotic" Hodges.

20/7/85 : Paul, Sue, Sean.

After morning spent contemplating going caving we all decided against it and spent the day sleeping or sitting around in the mist. No-one has come up from Lagos, where one is everyone?

The original plan was to have two three man surveying teams down 3/5 but Sean felt ill, I felt tired and Paul didn't want to go so the teams dwindled to three plus two, two plus two then one three man.

20/7/85 Fred, Phil, Geoff.

3/5 -> Xitu survey trip

In 13:20: 27 minutes entrance to top of Wingnut's rift Regroup & assemble survey gear. First survey station. Three legs later we were at the bottom ~~three more~~ & we were at the head of the pitch, down the next two pitches and we were going pretty efficiently still. Things went smoothly until picnic rift when leg lengths dropped while Fred & Geoff lay in puddles and pretended that compass & clinometer readings could be taken from within the solid rock. Phil, assiduously taking notes the while, staying one leg ahead to optimise positions. We emerged from picnic rift with a great deal of relief and stopped at the top of the following pitch for a lookie & brief fettle break. From there (station 24) five more legs took us to the top of the pitch into Xitu & one more, accompanied by breaking the (The Back Door to the East)

tape measure, took us to ~~the~~ a bolt in Xitu We were there! Photo at the bottom, then Fred prussiked up while Phil held on to the broken end

of the tape to take the last measurement.
A few piccie stops on the way out and we were on the surface at 01.40 (last out 01.55) Half an hour later we were back in camp.

21/7/85 Sean, Sue, Bill, ~~the~~ ^{host} the De-Tackling Trip 3/5

[Apologise for the biased write-up but I hate tight crawly caves ^{Sean}]
We set off down the cave at 1pm, making reasonable progress despite our numbers, and eventually reached bottom pretty uneventfully. Bill proudly gave me a guided tour of his cave - ~~the~~ ^{the} Pilling Slip, Graham-balls up, head of Dream Lake pitch. Everyone was being very apathetic at the bottom so we speeded things up by getting stuck on a pitch. I went up and undid her jam, then got cold waiting for the rest to arrive. After great difficulty, Bill appeared having derigged the pitch. We now had 2 bags. From then on it got harder and harder to move through the cave, until we got to the picnic hilt. This we negotiated pretty efficiently - the advantage of lots of people was appreciated. I had eaten my food about 2" ^{inside} the entrance so the others fed me at this point. The next obstacle was a ^{50m (C)} pitch. We decided hauling was just about worthwhile - and had two people for each tackle bag. [Phil says - "what on earth do you need two people for?"] Little does he know that we changed teams after 2 bags and we all so knackered we decided to finish detackling at that point. We pulled the bags onto the next ledge and set off out. It was on this journey that my true hatred of the cave came out. Every pitch has a horrible take off guaranteed to knacker tired cavers, followed by squeery crawls in which all your gear jams hundreds of times. We we all pretty chagged and did a slow emergence at Tam to see sunrise. back to camp for breakfast for unsympathetic welcome for our epic 18 hour trip. Ate lots - bed. Woke up about 10mins later

on one of hottest Spain days ever. Fred, Phil, Kristyn and Martin went off gaily to detachable cave. Dave # stayed crashed out and remaining valiant trio stomped off to the Refugio to rest their weary limbs. Never Again!

* Actually it was Dave who had trouble in getting tacklebags stuck. I just slowly dragged. Where's the 2nd 3/5 detachable trip??

date?

Well - there seems to have been an absence of any activity at all at Arico since 3/5 was detached, but the only things that seem to have been going on is it being used as a stopover for walks to Top Camp and as a sick bay - Kristyn was ill for a while here but got booted out by an over-enthusiastic SGR bounding down the mountain with pleas for caves at Top Camp.

Nicole & Geoff arrived on route to Top Camp & then proceeded the following day to get hopelessly lost in the mist. Having blundered into Area 9 (following cairns is not a good idea when they're on top of every bloody hummock going) & peered down a few holes, we blundered around a bit more and eventually, a bit cold and wet, got back down to the valley at the bottom of the mountains. Not having our luck again we called it a day & got back to Arico. Embarrassingly long walk just taking two heavy sacs for a scenic tour of Area 9 & back again. (Pah!)

Trying to make the best of a bad situation, plan 2 was to take the by now very well travelled route to Top Camp with Paul & Dave # first thing the following morning & cave. No such luck. Stomach cramps and general grogginess attacked & so Top Camp will now have to wait till the evening, when hopefully all will be well weather & health wise. Someone, somewhere does not want me to get up that bloody mountain.

Steve Davies & John Wilcock arrived & did an excellent job of sorting out the discards area formerly known as the food tent. Ian # also arrived & went off to T. Camp with a pretty ambitious looking pack to cave. Hopefully I'll be able to join el caves tomorrow... (oops, sorry I've just remembered... hopefully is an adverb. Apologies to all the literary brains on the Expedition).

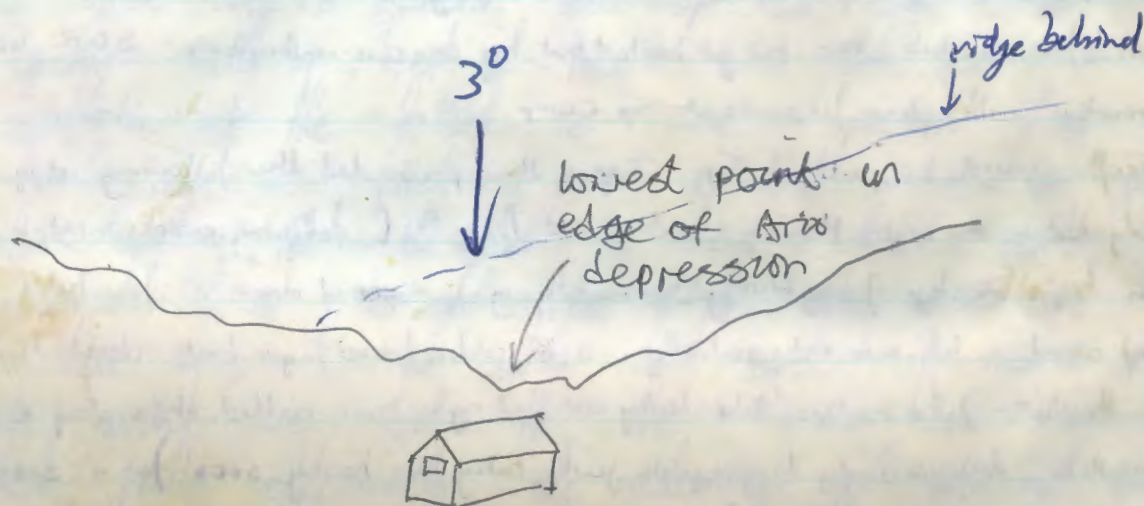
[Faint handwritten notes and scribbles at the bottom of the page, including "fill" and "shadow"]

(42) Thursday 25th July

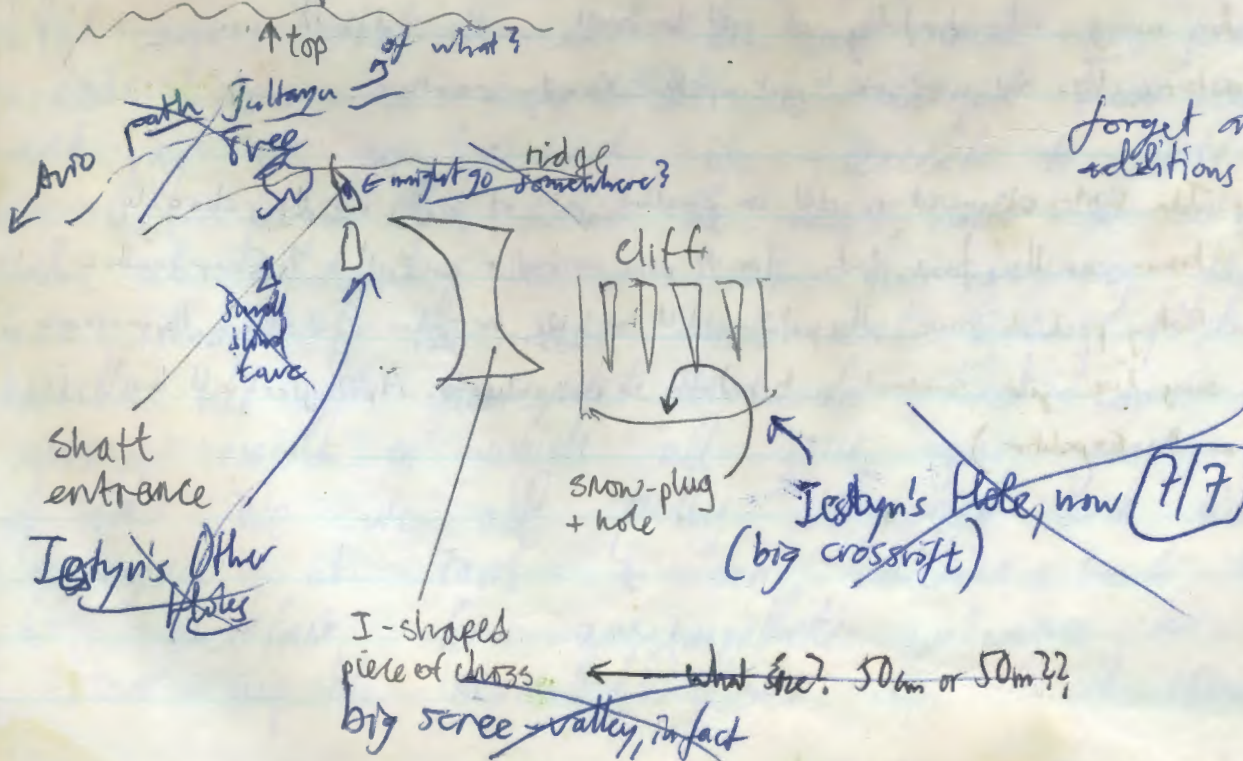
shaft-bashing Jultayn

After wandering about on the slopes all day without the sniff of a shaft, I nearly fell down this one:

view of AR10 from shaft:



sketch map of shaft area



forget all my additions in blue!
J.W. 8/8/85

see under
6/8/85
and 8/8/85

This is impossible - in fact the drawing suggests that the shaft is higher. If you walk from the camp site up towards the Xitu-Lagos path until you're in the direction indicated, you can see the Refugio disappearing behind a ridge higher than it. Y.W. The shaft is higher - even a little bit higher than Xitu, I reckon 6/8/85 G.W.

- (i) Shaft is approx. same height as refugio
- (ii) It looks a bit like F20. → doesn't help me; I've never seen F20. Y.W.

↑
What brilliantly clear instructions! (I.W.) (46)

Richard - probably time to tell tale of trip to Cangas. Went down on Thu. to get Steve Mayers to the 11.00 bus at Cangas. The problem: the Fiesta. The pigs would neither let us down to Cangas nor back to Erizina & forced us to go to Enol where we parked amongst a whole tribe of overweight Spanish families. Watched the dancing. Watched the fell race. Admired the cider. Had an ill team. Then another. Played scrabble. Steve Mayers made Quiz with the 'Z' on a double letter score and the 'Q' on a triple word score!

At long last the stentorian Guardia allowed us to drive down to Cangas, where everything was shut. We dropped off Steve at Ariondas, and returned to the Puente Romana - chatted up the owner & persuaded him to accept Fred's Bouquet. Then... the van's tyre was flat. The spare was flat. Chatted up the owner of the Puente Romana again and he took Fred + Dave to the garage in his car. The spare's valve was bugged... it was a race against time to get back to Erizina & my foot pump.

But... there was a Ford Granada in the way. It leant against the van, leaving some of its paint on mine. I had to reverse. 'Richard' said Phil 'you've only got 1 1/2 inches on the other side.' With heart in my mouth, and watched by 20-30 Spaniards, I reversed the van, releasing the Granada with a terrible screeching. We bounced the Granada over & inspected the damage... 'forget it' said the Spaniards, to a man, woman

(42)

and child. He's parked on the wrong side of the road, 'illegally'.
And it was true. Sleepily, we drove on.

Richard

Farewell Ario. Adios Tultaya. Hasta luego cabeza
Poma. Goodbye, fairy peaks across the gorge.
And you, jefe Julia, have a nice day. We're
going home. Another Ario draws interlude
is over.

David

27/7 John walked around area 5, gazing at shafts. Saw
Iestyn's shaft - looks promising. Took several photos of Xitu
fault with sun at a glancing angle. Time 1550 - 1630.

By 1730 cloud was advancing, so after traversing along
side of Tultaya from the col returned via cañoned route
& orange track.

Movements 27/7. Ian & Paul to top camp early.

Dave R. + Richard from top camp on route to base &
home at lunch time. Iestyn & Steve D. to top camp
at 1330 (why? in the heat of the day). Nicola
to top camp 1845. Jeff to base camp & home

1500 after fond farewells to Nicola (he had been
"tending the sick" all the previous night & most of today).

Sue arrived from base (feeling better) 2030. Gerhard ^{from Base} 2200. ^{Revised} 2230.

Items low at Ario - breakfast cereals, eggs, ~~veg~~ vegetables, petrol

Items low at top camp - carbide.

PAH! (Nicola)

28/7 Steve K, Sue & John W get up & go at dawn (ish) to Top Camp.

28/7 Location of rain gauge measuring cylinders

- a) There is one cylinder, reading in ml as requested, kept at the camp site. Go to Martin May's tent (the dark green non-semispherical, ^{new} ~~new immediately right of~~ ^{and to the right of} the food tent) and look under the porch, near the right hand zipper. There you should find a grey cylindrical (surprise, surprise) plastic tube, about a foot long and 10 cm in diameter, containing the measuring cylinder. Don't drop the latter; one side of the container is open.
- b) If you don't fancy carrying this thing over to the station, there is another cylinder kept "hidden" near it, which however reads inches. Stand next to the rain gauge. Look up to El Jito Pass and imagine a straight line running from there into your head. Turn round and follow this line down to the bottom of the little dry valley. At the opposite rim of a little pebble-filled shakehole a cardboard box, containing something round wrapped in cardboard, should spring to your eyes. The "something" is of course the measuring cylinder. If this description doesn't work you might want to consult an optician. The box is blatantly obvious even if you don't know it's there. *J.H.*

Sean Hodges passed by on the way from T.C. to Lago, picking up his tent and one empty gas cylinder. — (2¹⁵)

Phil Duncan stopped for a tea on the way from Lago to T.C. (2¹⁴)

28/7 Sunday ??? Arrive at L210 - Martin.

leave Lago in mist and small drops of rain but weather soon deteriorates and heavy rainfall attacks. I pass some strange creatures in the mist which ~~is~~ turn out to be Spanish with their raincoats over their tussocks. I laugh at them and tell them I'm English, they groan off into the rain like so many unhappy hunchbacks. As I walk on I find many yellow lizards sitting on the rocks trying to imitate the path markings and lure me from my route. But I wasn't fooled.

28/7, Sod it all. Half past four^(pm) the nasty black Cumulonimbus, having
swallowed Peña Santa dely Robliza, Peña Blanca & Punta Gregoriana,
starts to emanate a definite drizzle. Five o'clock: I've sort of ~~rainproofed~~^{rainproofed}
the campsite & retreated into my sleeping bag. Outside a liquid hell is
raging. No water shortage now! Seven o'clock: six cows invade the camp,
eat a glove, drag the big billy around. I can't be bothered to get out
and they happily ignore my bone-freezing screams. One walks past the
tent, I try to hit it through the flysheet but instead get a kick on
my fist. Another one comes near and tries the grass under the edge
of the porch. This time I'm gutted. The beastie strolls off, mildly un-
impressed. Half past eight: A soaked Martin May arrives from Lagos.
Coaxes me out of his tent and lifts up my spirits sufficiently to set about
making a joint supper. Half past nine: For half a minute the rain
actually stops and clouds and peaks ~~are~~ receive a fantastic yellow
illumination from the westering sun. I hasten to grab a bog roll but
before I can turn and leave the shelter of the porch the next
flood comes down. Oh sod it!!
Well, it did stop after all - quarter past ten-ish. Thank goodness. ^{cy. V.}
is running merrily now. ^{The Spring}

29/7: M. May up to top camp early in the morning, taking along some carbide.

29/7: Leave 12 noon for shaft bash area 7 (Iestyn's hole if I
can find it), armed with compass, point, and All the rope I
could find at Arto (viz. NONE whatsoever). Left the camp cow-
and rainproof (I hope) - please do the same if you come by
and leave before I'm back. Gerhard W.
P.S. The stove is in the porch of Dave's tent.

Arrived back at 6^{pm} without having found Iestyn's hole. Shaft
sniffing is obviously an art I still have to learn. The rain
caught me even before I'd reached 3/5 and then rain & sun
kept chasing me into & out of my waterproofs every few
minutes. - Spent 2½ hrs thrashing in circles around the midst of
nowhere at all, steering by "view of Arto", until the clouds decided
to obscure the latter. Called it an abortion, kept poking around,
stumbled into an 8m long 0.5m deep cave, spotted a promising

(45)

rift entrance and had a look at it - really appalling. Since it had looked all too inviting from above I decided to discourage future explorers and waste some paint on it. It is 8/7. Thus 7/7 is reserved for Iestyn if he can find his shaft again with a pot of paint on him. Hope the rain hasn't melted his snowplug-under-the-cliff. - Took a few pictures of 8/7. It misfits Iestyn's description in that it's too low for the ^{Refusing to be visible.}
Location of caves. Follow Jultayu path from Trea junction for 20 cairns.

Make sure you overlook the same number as I did. This should bring you to a point where an SE-marked obvious cave entrance is visible down to the right, the cairned route continues up around the right side of a promontory and a small track leaves off to the left contouring round the mountain, ascending only gently. Follow this, past a "3m-sized VW Beetle" ^{sitting on another one} shaped rock on your left, for about 50m. To your left you look down a cliff into a deep snowplugged blind valley. (Is this Iestyn's snowplug? - it's ^{almost} the only snow I've seen today.) The path continues across the valley which is a 45° scree slope heading due north towards the snow. Choice of 3 routes:

a) Run down the scree following the avalanche you're kidding off. Go exploring near the bottom of the valley. Several shakeholes NE and E of it, and interesting karren with up to 6m of nothing below your feet.

b) Go straight up the scree heading for a rock promontory with a straight 3m-high cliff face as its left-hand side. The "8m long cave" is found behind a bunch of nettles, the continuation of the cliff face is its righthand wall. Stepping back from the cliff you can ^(It may be Luricomic - it did have a cross on it though) see Jultayu (I think) ~~over~~ over its rim at 242°. And is at 353°. At 60° to the right of a small sloping ridge you may be able to make out 8/7 way ^{below}.

c) Follow the path, crossing the scree and climbing a little rock staircase, for about 90m. Above-mentioned sloping ridge begins to your left with another little scree valley going ^{to the right} down in front of it. At its foot a triangular entrance marked "8/7" etc. is visible. Scramble down the scree over a couple of "dams" between shakeholes and enjoy yourself.

Description of caves. "8m long cave" is 8m long, 0.5m deep, heads due south, has a triangular cross-section and a pebble-floor and chokes completely.

8/7 is developed along a rift heading 70° E one side of which forms its roof (as well as the wall where the paint mark is). Climb down a canyon over boulders from SW until you're in the 1m wide rift. Follow it N; it immediately widens into a small chamber whose floor consists of (cow's?) bones, pebbles, leaves & a bit of snow. Light can be seen through the 5m wide continuation of the rift ahead and above. The rift also continues down to the right at a similar width. Stones thrown in don't seem to go anywhere far. "Further progress could be made by blasting."

Ideas for further shaftbashing (or -thrashing) there

- a) find Iestyn's thing, Either it's a lot higher or further west than I thought.
- b) Investigate the big fault systematically. Probably entrances along it have long been filled up with scree but there might be some cave development underneath and perhaps one can get into it from an entrance offset to one side.

G.W.

30/7 John W. & Steve D. passed this way en route for base camp from top camp. Had grapefruit slices + tea with Gerhard. Food is generally low at Ario. Now only 3 tents + food tent — may be possible to take up large brown tent at next trip up, leaving 4 sleeping spaces only at Ario (present 7).

wanted: bread, vegetables, morn flakes, possibly eggs, tinned meat, petrol, oil, rubbish bags

6pm. Buenos Tardes Ario. lovely day, I don't think. I arrived at Los Lagos on Sunday afternoon after 3 days on my motorbike - my bum was sore! Got volunteered to look after camp yesterday while everyone (Fred, Martin H, Sean, Steve & Hilary) went down to Cangas. It rained. Walked up here in the cool of clouds met John Wilcocks, who confessed to having done NO carving at all, & Steve Davies. Gerhard was all set to leave the minute he saw me, is it something I said? I think he's fed up of Ario, I have to go back to Lagos because I only brought my carving gear & everything else including my pills is at Lagos still. so bye. I'll be back tomorrow.

G.W. Leave 6¹⁵ pm trying to poke around in the mist and stumble across Top Camp by accident, after having spent a lovely clear & sunny ½ hour packing a mega-heavy rucksack.

Beach trip 31/7/85 . Be there!

(30/7) Cheers — 11⁴⁵ pm back to Ario, very successful as far as the first half of my proposition went. Left Margot at the Iron Stake and soon found myself somewhat too far south. Bearing 290° completely

Paul,

Useless. Looked across area 9, climbed up over into area 8, stumbled
(42) across a new but blocked shaft in the rain, then suddenly saw blue -
"Polifema", I said to myself. Followed this. Clouds lifted a bit, ah - there
right in front of me was the Verdell - oh shit, that's Curviente. -
Lost the blue path at last just in time for the last clear moment
of this evening and a brilliant view across to the Torcada-Pass and
the eyeholes. The former disappeared again immediately. Reached the path
past the eyeholes, went on to get a vaguely familiar view of what
I think is called the Vega ^{de} Aliseda, then started to wonder whether I
~~shouldn't have~~ turned left somewhere and got higher up - and then
I was in the clouds. Abortion. Arrd half past eight. Back - and
fast. I still had a good guess as to where I was, not the foggiest as to where I
^{ought to have been.}

Gained the eyehole-path again, or so I thought. Got no glimpse of the
eyeholes. Followed the path which was very obvious and kept joining
with others. Then it began to be marked in red. Passed an SE-cave.
At ^{again} 10 pm I was carried way south into area 5 - La Jayada grumbled above me...
It suddenly got very dark and simultaneously I lost the
red marks. Followed compass & guesses with a weakish headtorch
illuminating the mist and invariably stumbled over ridges to look
down vertically into the next pathless depression. Managed to stick
to a roughly northeasterly bearing until a really nasty deep dent
blocked my way completely. Contoured round it to the right, traversed
across a narrow gully and sat down, panting with exhaustion. A moment
ago I had made out a faint shimmer north of me. Refigured!
Waited till the clouds opened for a moment and the Plough showed
four of its stars. Got up again, shouldered my all too heavy pack,
found no way ahead and crossed back over the gully, only to stop
stunned and stare at my feet.

I was standing on a yellow dot!!
Turned to the side and looked at the "gully" again - and read
"715". Ah! Very well - I know this path in mist & darkness.
No 10m further had I lost the yellow marks. Oh ~~burnt~~ all
paths. Found them again and slowly staggered to the campsite.

Top Camp doesn't seem to like me - not that I
like it too much after this...
U. N.

(50)

Aug 1st 7-20

Fred ~~strolled~~ strolled & I plodded laboriously up here with the intention of going to Top Camp. However the mist was against us. The food tent has a big rip in the fly sheet so we moved everything into the next Vango & took the first one down. We had a brew & a butty & relaxed with Frederick Forsyth, when lo, we heard the plodding of weary footsteps & 'Say I couldn't find Top Camp', William had joined us for an impromptu party. Onions were chopped, water boiled, wine poured.

(Margot)

2/8/85.

Nicola and I set off ~~for~~ for the main assault on Top camp defences. Cowardice prevailed at the Mirador as the crack SAS unit weakened and took to plan B, which is a strategic retreat to Area C otherwise known as Aris. Having set into this line of thinking we set about preparing a quick and easy meal. 'John West meat' would be nice we thought ~~unfortunately~~ Unfortunately the absence of a tin-opener caused great frustration and after half an hour of tearing, stabbing, ripping, chewing etc. of the can I retired with a serious flesh wound in the thumb. Anyway a ^{superb} meal of pasta, chicken supreme and the little bit of J.V meat I could extract from the battered tin followed and we retired suitably exhausted by the evening's activities

Paul//

P.S. Appalling writing due to wounded thumb, not alcohol. Really!

3/8/85 PL1 + PL2
 Called by after a ~~long~~ walk down from
 Prop camp via Tulkuya + Ca de de Luenga. PL1
 went down to Cagas + PL2 returned to top. - Both
 ate a tin of faka ~~and~~ bread + drank a
~~little~~ ^{box} of wine. Have decided to try + take
 part of my big vase together + use it picked
 as a stove tent.

Sunday 4/8/85 John W. passed this way after a very
 hot climb from Base camp, to collect kit left here, and
 en route to top camp. Spent the hottest part of the day
 in the shade of the tents & tidied the food tent, which is
 now well stocked, even with fresh (ish) bread and eggs.
 Opened a tin of orange slices using a tent peg and lump
 hammer - I think a proper tin opener at Ario would be
 useful. Took survey instruments + 1 sheet of graph paper from Ario
 to top camp, also new log book for top camp & fluorescein for
 F20 → 1/6 connection studies. Probably my last visit to Ario
 - pity, it's such a nice site for feasting around if the weather
 is good; however, there's work to be done at top camp.

Sund 4/8/85 Arrive at Ario 8⁵⁰ pm and find the cows have raided a rubbish
 bag, not to mention other even more material traces of their presence. Celebrated the rest of
 my birthday with an excellent "Beef Stroganoff à la John West". ^{Got}

Mon 5/8/85 John Hutch passed by for a tea- and drying-breaks en route
 to Top Camp 10¹⁵-1⁴⁵

(52) 5/8/85 THERE'S A RUMOUR THAT SOME PEOPLE CONTEMPLATE GIVING UP EVEN THE CURRENT MINIMUM PRESENCE AT ARIO.

AS ONE WHO HAS SPENT MANY NIGHTS HERE, MORE THAN ONCE ALONE, I MAY BE ALLOWED TO MAKE A FEW POINTS ABOUT THIS IDEA.

AT THE MOMENT, ARIO IS BEING USED AS:

1) MET'-STATION, (YES I KNOW PHIL ROSE DOESN'T LIKE TO BE REMINDED OF THE FACT.)

2) BASE FOR SURFACE SURVEYING AND SHAFT PROSPECTING IN AREAS 5, 7 AND 9. SHAFT BASHING IS IMPOSSIBLE SINCE NO TACKLE. JESTYN'S SHAFT ON JULTAYU HAS NEITHER BEEN MARKED NOR PRECISELY LOCATED ^(YET) AND ANOTHER CASE OF A RIDGE CAVE SYNDROME IS ABOUT TO HAUNT THE NEXT FIVE EXPEDITIONS.

3) CONVENIENT STOPOVER POINT FOR PEOPLE WHO DON'T MAKE THE DIRECT LAGOS-TOP CAMP RACE IN LESS THAN $2\frac{1}{2}$ HOURS. EVEN MORE CONVENIENT IF YOU WALK UP HERE IN THE EVENING, STAY OVER NIGHT AND CONTINUE THE NEXT MORNING SO THAT YOU ARRIVE IN TIME AND FRESH ENOUGH TO GO CAVING. (AND WITHOUT HAVING HAD A DINNER OUT OF THE SCARCE TOP CAMP SUPPLIES!)

4) OBVIOUS POINT TO RETURN TO WHEN YOU'VE GOT LOST IN THE MIST AND TOP CAMP IS STILL OUT OF THE RANGE OF YOUR WHISTLE. (WHO COULD BE BOTHERED TO RETURN TO LAGOS ??)

5) STORAGE SPACE FOR SOME PERSONAL EQUIPMENT (IN MY CASE, FILMS, SPARE CLOTHING, SOME REPAIR MATERIAL AND THE LIKE)

THERE'S NO SPACE FOR ANY MORE TENTS AT TOP CAMP. THERE MAY BE ^{BY} ~~THE END OF THIS WEEK~~ AND IF DESPERATE WE COULD MOVE MARTIN MAY'S TENT (THE GREEN ONE) UP THE MOUNTAIN. HOWEVER, WE WILL BE FEWER PEOPLE THEN AND CROWDS OF A DOZEN OR MORE CAN'T GATHER ANY LONGER AT TOP.

WITHOUT A CAMP AT ARIO I'D THINK TWICE (OR MORE) ABOUT WALKING FROM LAGOS TO TOP IF THE WEATHER IS ~~EVER~~ SO SLIGHTLY DOUBIOUS AND I MIGHT THINK IT WISE TO SPEND THE REST OF THE EXPEDITION AT BASE, (SIC!)

THINK ABOUT IT, (AND IF YOU DISMANTLE THE CAMP WITHOUT HAVING READ THE ABOVE, BEWARE I'LL CATCH YOU AND ~~SMASH~~ SMASH YOU ON THE HEAD WITH THIS LOGBOOK!) LOTS OF LOVE FROM Ugerhard

Mon 5/8/85 4⁴⁵ pm Arrive Fred, Phil D, Phil S, Ukey & Duncan G! Welcome (back) to (53)
Arto!

D.
Phil ^h thinks "I'm remarkably little".

Tue 6/8/85
9¹⁵ am Ukey & Duncan & Phil D & Fred off to Top Camp in the rain.

4^{pm} We're out of gas (and out of oil) and I can't get the Coleman stove to work. Pretty "cool". At least it has stopped raining for a moment and I'm off with the paint to try to find Iestyn's shaft.
Y.N.

All I've got after 1 hour is a sore thumb and a heap of broken, burnt or otherwise useless matches.

5^{pm} John W arrived after very misty walk from top camp. Conditions at top camp are atrocious - we had hail yesterday, snow today, force 8 winds and otherwise non-stop torrential rain. People don't get up early under these conditions, and one caving party did not leave until 2 pm! (Well that's not an exception...)

9^{pm} Back from Area 7, no working stove at the camp, and the Refugio has run out of food! John^(W) & I at least have a coffee up there. — I hadn't got far when clouds & rain had caught up with me again. Knowing I had no chance I used it as well as I could and having messed around for a while I indeed nearly fell down Iestyn's hole. ^{It actually is a} ~~And then the clouds~~ ^{but it is the one} tore and the sun came out - just after I'd taken some misty ^{John W found after I.W.'s} ~~drainings~~ ^{5/7/85} ~~piccies~~ ^{drawings} of the entrance. Took bearings, explored the surroundings and the way from/to the cairned path, sprinted up to get a nice picture of the gorge, but too many clouds sitting down there only waiting to come up ~~to~~ to me. Marked Iestyn's thing as (7/7) and trotted home.

Location of cave. Follow the J. path for about 48 cairns from the Trea junction. Since this is not very likely to be reproducible, alternative instructions: Climb up until the path reaches the ^{ridge of the} large northern spur and you look down into the Sou del Jaltaya (the deep ~~basin~~ ^{basin} with Curvicente at the far side). Then turn and go back down 6-7 cairns. - Either way you should end near the top of a long grassy slope with Arto

(54) north of you, and a scree valley sloping down parallel to the grassy ridge on its western side (which is to your right, looking up to J.) The transition from ridge to valley is mostly steep and in one point ^{consists of} a vertical cliff controlled by a rift cutting into the ridge (with a tree growing out). Don't climb down there unless you're Richard or suicidal, but take a less lethal path either meandering down from above (left) of the cliff or contouring round below (right) of it to cross the scree slope at one of various obvious levels. Follow path across a little col. To the right a grassy hillside gives an excellent view of the Refuge & of part of the Caves gorge. This is where my bearings were taken. Straight ahead a big crosscut rents the rock, and the marking is on one of the rock faces ~~to the~~ on the right side.

Description of cave, as far as visible from outside: Vertical rift striking $60^{\circ}-280^{\circ}$ intersects E-trending rift striking N-S. 10m below surface a snowplug is visible at the intersection point. Stones go past it but apparently not very far. Way on along one of the rifts may be possible. Worth a closer look in any case.



Bearings from the Viewpoint on the Little Hill:

Ario 3°

(don't know which of the things behind it is Tulayua, sorry)

Twin peaks of the diff behind the Canal de Trea
59° and 60°

Cave entrance in rift E of scree valley 125°

Top of Tulayua 155°

7/7 ~260°

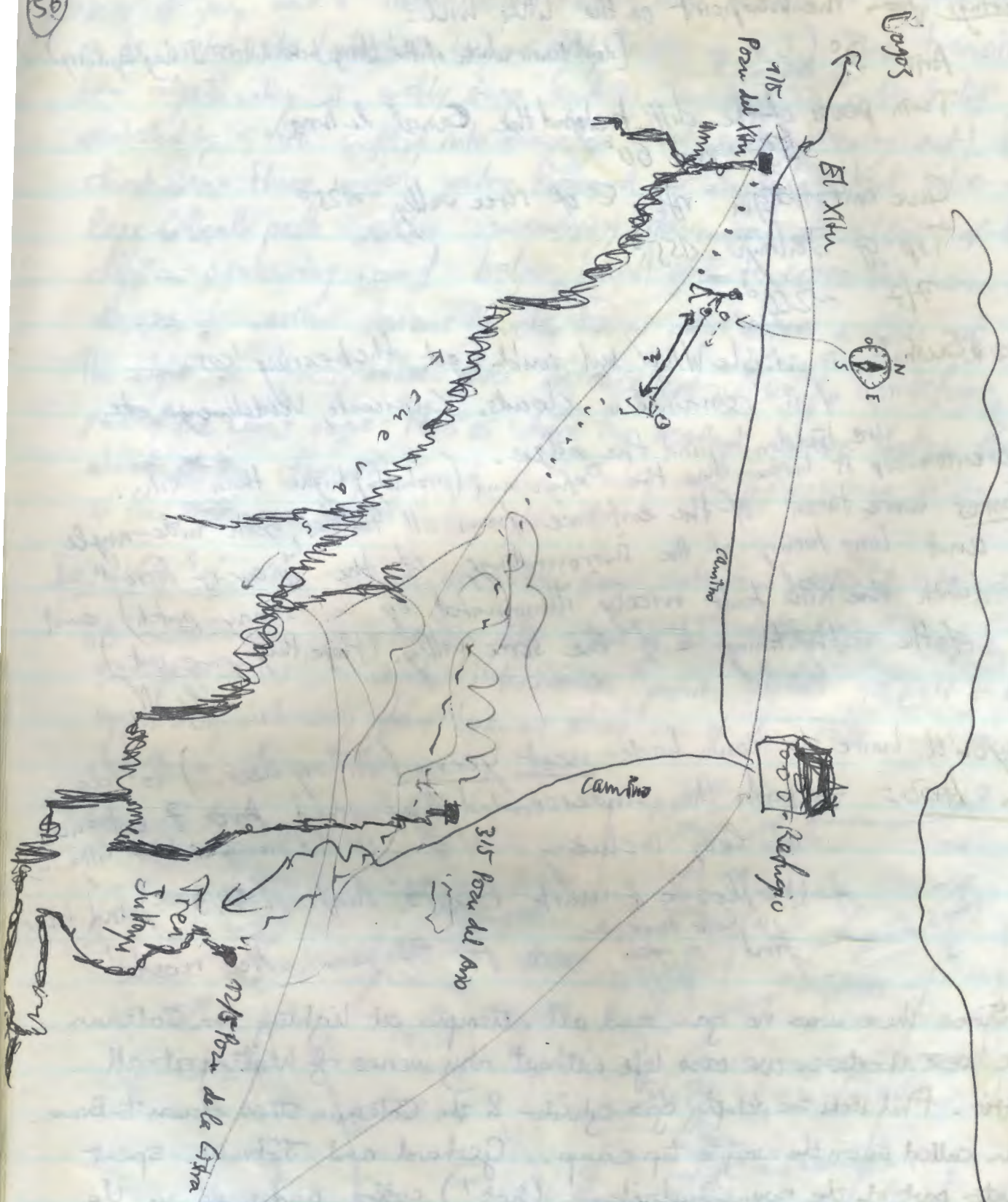
Pico d. Gushutem is visible WNW but couldn't get the bearing 'cos top of it remained in clouds. Curicente, Verdelluenga etc. are hidden behind the ridge.

The entrance is higher than the Refugio and (probably) higher than Xitu. Pictures were taken of the entrance from all 4 sides, both wide-angle and long focus, of the surroundings, of the "view of Ario" (with the Xitu fault nicely illuminated by a sunny patch) and of the rift thing E of the scree valley. (Hope they come out.)
G.W.

So you'll have to come back next year (oh my dear...) to do from Ario: — bash the undescended/unfinished Area 7 entrances at last, including 7/7. (It's this one went into Gstra....)
— (re-)locate & mark Geoff's shaft (10/9 ?) and have a look down it.
— And a few more for the year after next!

Since there was no gas and all attempts at lighting the Coleman stove were abortive, we were left without any means of heating at all at Ario. Phil took the empty gas cylinder & the Coleman stove down to Base. Martin called in on the way to top camp. Gerhard and John W. spent the later part of the evening drinking (hot!) coffee and wine in the Refugio, which was at least warm. Later we stumbled down in the dark back to camp, where we fancied some mornflakes. In the dark (or was it because of the wine) we helped ourselves to a liberal helping of salt instead of sugar — and so to bed. There was ground frost at Ario.

→ Would've had some Bocadillos but poor Bras is left with $\frac{1}{2}$ loaf of bread for himself and that's all. The Refugio is not entirely reliable as an emergency stopover point ...



[This is to explain Bras why we wanted to borrow his measuring tape for surface surveying. I know you merry speleologists don't need such silly drawings to get your ideas over...]

20 m "Elephant" measuring tape (made in Spain) courtesy of Bras at Arco Refugio.

Wednesday 7.8.85. Gerhard & John W. do surface survey 12/5 → 3/5 → 1/5. Problem, we have compass & clinometer but no measuring tape, since all the tapes are underground at top camp and cannot be released. Ever resourceful, John had spotted a 20m measuring tape in the kitchen at the Refugio the previous evening. So it was up to the Refugio for a 9am coffee and the accompanying sketch by Gerhard was used to explain to Bras what we wanted it for — he duly obliged with the loan of the tape. Here are the survey readings — a second copy is being taken back to Britain by John W. where it will be computerised & plotted. It should be useful in closing the traverses for 12/5 → Xitu, 3/5 → Xitu. Fixed points for future reference are the painted ⊗ circles on 12/5, 3/5, 20/5 and 1/5 (Xitu), the base of the signpost stake on the yellow path (sign now missing) and the centre of the "rays" on the Mirador. John W. Compass + clin, Gerhard tape

Station numbers	Distance m.	Compass °	Climo (10m scale)	Climo (°) (±0.5)
⊗ → 1	11.2	288	+9.25	+42.5
1 → 2	2φ.φ	294	+1.25	+7.0
2 → 3	2φ.φ	331	φ	0
3 → 4	2φ.φ	334	+1.65	+9.5
4 → 5	2φ.φ	352	+3.1φ	+17.0
5 → 6	2φ.φ	17	+4.25	+23
6 → 7	15.7	2	+3.75	+20.5
7 → 8	2φ.φ	325	-0.75	-4.5
8 → 9	2φ.φ	φ	+1.1φ	+6.5
9 → 1φ	2φ.φ	φ	+φ.7φ	+4.0
1φ → 11	2φ.φ	353	+2.φφ	+11.5
11 → 12	16.8	346	+2.5φ	+14.0
12 → 13	2φ.φ	352	-2.5φ	-14.0
13 → ⑭	3.8	323	-6.φφ	-31.0
13 → 15	2φ.φ	338	-1.φφ	-5.5
15 → ⑮	18.9	9φ	-4.75	-25.5

(P.S. Stations follow Jukayu-Ario path to n18, then cut across along Xitu fault to the Iron Stakes, then follow the Xitu path.)

Station numbers Distance
 m

Compass

Climo
 (10m scale)

15 → 17	2φ. φ	322	+φ.4φ	+2.5
17 → 18	2φ. φ	33φ	+1.4φ	+8.0
18 → 19	2φ. φ	321	-φ.75	-4.5
19 → 2φ	2φ. φ	289	-1.φφ	-5.5
2φ → 21	2φ. φ	28φ	+φ.5φ	+3.0
21 → 22	2φ. φ	3φ2	+φ.5φ	+3.0
22 → 23	2φ. φ	296	-φ.5φ	-3.0
23 → 24	2φ. φ	296	φ	0
24 → 25	2φ. φ	298	+2.2φ	+12.5
25 → 26	2φ. φ	283	-φ.7φ	-4.0
26 → 27	2φ. φ	277	+2.9φ	+16.0
27 → 28	2φ. φ	27φ	+5.2φ	+27.5
28 → 29	2φ. φ	29φ	+1.φφ	+5.5
29 → 3φ	2φ. φ	297	-φ.2φ	-1.0
3φ → 31	2φ. φ	3φ7	φ	0
31 → 32	2φ. φ	28φ	+φ.25	+1.45
32 → 33	2φ. φ	3φ9	+1.7φ	+4.5
33 → 34	2φ. φ	316	+φ.5φ	+3.0
34 → 35	2φ. φ	348	+φ.9φ	+5.0
35 → 36	2φ. φ	348	+φ.9φ	+5.0
36 → 37	2φ. φ	3φ9	+φ.25	+1.5
37 → 38	2φ. φ	293	-1.φφ	+5.5
38 → 39	2φ. φ	289	+φ.5φ	+3.0
39 → (4φ)	1φ.4	267	+3.7φ	+20.5
40 to base of stake ← 1.6φ m vertical.				
4φ → 41	2φ. φ	25φ	-1.5φ	-8.5
41 → (42)	5.1	15	-4.6φ	-24.5

Station numbers	Distance m	Compass	Clino (10m scale)	
40 → 43	20.0	301	-0.25	-1.5
43 → 44	20.0	302	+0.35	+2.0
44 → 45	20.0	301	+2.10	+12.0
45 → 46	20.0	301	+2.30	+13.0
46 → 47	20.0	281	+2.00	+11.5
47 → 48	9.1	271	-0.50	-3.0
48 → 49	20.0	279	+0.90	+5.0
49 → 50	20.0	291	-1.00	-5.5
50 → 51	20.0	301	+1.00	+5.5
51 → 52	20.0	279	-0.85	-4.5
52 → 53	20.0	274	-0.80	-4.5
53 → 54	20.0	255	-0.50	-3.0
54 → 55	20.0	268	-0.75	-4.5
55 → 56	12.0	244	-3.10	-17.0
56 → 57	6.3	110	-3.50	-14.5

- 0 Red cross at 12/5
- 14 Red cross at 3/5
- 16 Red cross at 2/5
- 40 Eye level at iron stake on yellow path (base of stake is -1.60m (below) this)
- 42 Red cross at 20/5
- 48 Centre of "rays" on top of Mirador
- 57 Green cross at 1/5 (Xitu)

Accuracies : Distances to 0.1 m
 Compass to 1. degree
 Clino to 0.05 on 10m scale

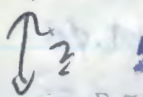
Nicola & Dave Horsley called in on way from te to bc. John W & Gerhard to Base camp. Sorry to leave you, Aro and the Picos.

John

Wed 7/8/85 A Postscriptum to the Area 7 shaft-thrashing business.

(60) I've just re-read the Proc 10- & Logbook entries referring to 1/7-6/7, and my horrified impression is that I might have made a thorough mess. There are now three pairs of caves which roughly fit the same descriptions and locations (as far as the latter go) and may or may not coincide, viz.:

1/7 Pozo de Vaxeya
shaft above a lower
entrance, under the
Jattayu path, on the
northern spur



Iestyn's "shaft-entrance"

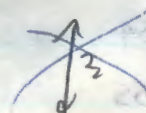


my "Iestyn's Other Holes"

6/7 Rift with snowping at
-8m, in a depression



Iestyn's hole-cave-snowping



my 7/7 - see above.

The old logbook entries and sketch maps are too vague to make sure whether or not they refer to the same caves as mine, and Iestyn's Illustrated Guide to the Picos - well you've seen it. However, I have had a close look at "my" crossrift before I marked it - from all sides - and seen no sign of any previous marking - 6/7 is supposed to be marked as such. (Has 1/7 ever been marked? - And somehow I haven't noticed a proper shaft where according to Iestyn & 1/7 there ought to be one.)

Someone knowing his/her whereabouts in area 7 will have to

8/8/85 sort this out one day, I'm afraid. Sorry for the trouble...

P.P.S. After I final talk with Iestyn I'm pretty sure that: G.W.

- his shaft-entrance is 1/7 whereas his snowping+hole is just that and doesn't go anywhere far,

- the thing John W. & later I found by his description, now marked 7/7, is probably new, and has nothing to do with Iestyn's holes.
G.W.

Wed 7/8/85 4³⁰ pm Down to Lagos, having dismantled the (61)

2nd Force Ten and carrying both with me. The brown (D. H.'s) tent is now the stored food & kitchen tent. Somebody carry the carbide, mailons, bolts, hangers & the big Fabada tin up to top — these are certainly no longer needed here. E.V.

THURS. 8 AUGUSTO 1985

Margot + Phil S. arrive after a pleasant walk from Lagos, to scave off a flock of sheep licking morn flakes off the (un-dane) washing up.

Took off our boots, sorted gear, ate morn flakes, festered etc [I found my fav. wrap-spot from last year: lots of interesting plants growing in it, and my score still scratched on the rock].

We're not taking anything to top camp from here except my gear, and since it is now 12:00 we are taking the bare ~~minimum~~ minimum.

- I'm leaving my spare (new) over-suit here, if some kind soul will aid it on its way to TC.

Flies seem to be worse than last year, Philip S.

P.S. We have wought a can opener. Thanks a lot!

Later: Margot is now chasing a sheep yelling "come back you silly sod, and give me back that spoon!" I think the heat is getting to her. It picked it up by the handle & walked off with it.

9-9³⁰ pm: Ukey & Dave H. pass by on the way to Top Camp, taking along the latter's tent. Martin Hides has taken his sigg bottle down with him during the day & ~~left~~ left the petrol in a mornflake tin. Could someone get an empty sigg bottle

from Top and pick it up, it is neither safely stored nor transportable as

It is now, 9⁴⁰ pm Gull. arrives & sorts out the mess the place is in.

Stuff to go up: (apart from the petrol) Fabada tin, other food tins (apart from some one-person emergency stuff as long as a tent is here, e.g. Morn flakes, Stewards Leftold 7 Min.-Ready Dishes etc.), Carbide, Mailons, hangers, bolts etc. etc.

Stuff to go down: Petrol lamp (choiced somewhere), Surface survey instrument set, 365 survey, shaft bashing left, most of the cutlery & crockery. And the surplus gas cylinder lid which I stupidly left behind. P.D.

(62) Stuff to go up eventually, i.e. when the camp is abandoned completely:
all remaining food & gear, (rest of) gas cylinder, ^{pos. water container} ~~pos. water container~~ & ^(with its lid, pray!) ~~washing up bowl~~
Stuff to go down eventually: cooler, water containers, remaining cutlery & cooking
stuff, Logbook, medical kit, items left behind by various people
unless they pick them up before. — And all the rubbish!!

A group of nice people from London is "taking over" our campsite, —

Porridge (or not milkpowdered & sugared Mornflakes) tastes ever so much nicer
with cinnamon.

G.W.

Remember the Expedition T-shirt for Bras!

Fri 9/8/85 12¹⁵ ish. G.W. leaves Aris for T.C. with personal
gear + a few plastic plates & mugs. Intention to return in the
afternoon and carry up a load of food, ^{carbide} the petrol, [&] possibly other
stuff such as the Savlon bottle, one water container, the remaining tackle, some
cutlery. (And the gas cylinder??)

The five Londoners (see above) have left for the Caves gorge, —

My camera with zoom lens & telefocus lens is missing!!!

Last seen on 7/8/85 morning when I put in a new film.

(Stupid thing to take away; the camera body is old & banged, & both lenses
are sublimely defunct — I know how to cope with their idiosyncrasies.)

Gerhard

6⁰⁵ pm Back to pick up the second load. Bl...y sheep
all over the place, have dragged out from the porch 2
rubbish bags, the eggs and the salt tin. Damn clever.
I found the salt tin 15 yards away upright and empty
and with ~~no~~ visible trail of salt leading there — they've
licked it all up. Meanwhile the ungerthe has produced
quite an independent mess,

Taking up to Top Camp:

BDH container full of Ca₂.

2 Padelobags

25m rope

several hangers, crabs, waitlons, bolts; 1 betay

1 tin Tabada

2 tins Mornflakes

2 Mtl.-tins with bagrolls + 1 egg each

2 John West meat tins

1 Mtl.-tin with lentils

1 ^{padel} bag with ^{rice} 2 onions, 1 pepper & several 'atoes

1 box Spice 'n' Bastes

1 box Matches

assorted cutlery

Washing up bowl

Sigg bottle with the petrol (don't use the 'petrol' Mornflakes

Leave 9:30 pm in the mist. Fun for food!!!

Gerhard

SATURDAY 10 AUGUST 1985 13:19

P.M.S. arrived for T.C. by circuitous route (but educational).

Mission: To pillage Arid & get vms for T.C. Place is deserted, even ~~off~~ of sheeps.

My sleeping bag & new TROLL SUIT to go to Lagos please.

Have taken UVISTAT & needles (sewing) from 2nd aid kit.

Decanted all remnants of tulipan into one pot & taken to T.C.; ^{reoloko} can full of ex tulipan container. The petrol appears to have evaporated.

Got 3 vms for me, PR & FW. Added to totabin back of this book. Left for T.C. 14:20. P.M.S.

Mon 12 August: YW ~~was~~ crashing out here 11:20 pm after having spent 3 1/2 hours getting lost from T.C. to Lagos (well, in fact I was taking a nice & easy shortcut - but not knowing this & seeing less than 20m ahead in the mist I kept walking slowly and consulting my compass every 5 steps. Also some of the stone arrows on the Lagos path have been rebuilt/rearranged since I last saw

No it hasn't!!!

(64 out) them which was a bit confusing) 3 hours festering (repacking/leaving) talking to John & Margaret & Phil & 3 Spanish cavers from Valencia, and ~~3~~ 4 hours with mega-heavy pack destined for Top Camp walking uphill in the dark & mist. Managed to find all the way to El Jito without turning my headtorch on - something to be proud of when you fall into the one lonely tent remaining here stiff and clammy and disappointed with your other achievements today...

Tue 13/8/85

QUOTE OF THE DAY - by Jefa JULIA @ the Refugio

(my rendering of her Spanish is certainly incorrect, please amend) :

"¿Tu estás del grupo del vino?"

Got up 8^{am}-ish, had a coffee & a Spanish lesson at the Refugio (trying to explain to Julia & the others that we're doing long overnight trips & where the water is probably going to & what our caves are doing in general). 9³⁰-ish off to T.C. via the Met. Station - my pack is still as heavy as yesterday although I've nibbled some bread.

John

And now it's all over...

Greetings from Bras - hopes to see you back next year!

These notes are for your help in the event of a major accident such as a fall or a roof collapse. They are not a substitute for qualified aid. They are designed to help you bring a victim alive to the surface.

DO THE FOLLOWING IN SEQUENCE.

- 1 DON'T PANIC. Be methodical. Don't be rushed into hasty action. Keep your reason.
- 2 MAKE PREPARATIONS TO TAKE THE VICTIM OUT. Unless the injury is obviously trivial, all accident victims should be brought to the surface as soon as possible. Beware those who have been hit on the head but look "all right now". They could be bleeding inside the skull and be unconscious and dying in a couple of hours. GET THEM OUT.
- 3 CONSCIOUSNESS. Is the victim able to talk? If so, ask them if they can feel and move their limbs. IF NOT, ENSURE AN AIRWAY.

4 AIRWAY. PULL THE JAW FORWARDS, AND KEEP IT THERE. This stops the tongue lolling back into the windpipe. The ideal position is "sniffing the spring air" - head forwards and chin up. An unconscious patient will die rapidly without an airway. If they puke or look as if they might, roll them on their side and let the vomit come out - BUT SEE "BACK".

5 BLEEDING. If they are obviously bleeding, PRESS ON IT with your hand or a pad, for five or ten minutes without peeping. If it doesn't stop, keep pressing.

6 PULSE. Compare the victim's pulse with your own. SHOCK - severe blood loss - the victim has a fast, thready, weak pulse; they are cold, clammy and sweaty. If you are in no doubt that the victim looks like this, they need an intravenous line (see below). If you are in ANY doubt, don't; caves are mucky places and you'll cause more trouble than you'll cure. When you have a line, give all the fluid you've got. GET THEM OUT.

7 BACK. DON'T MOVE THE VICTIM UNTIL YOU'VE FELT THEIR BACK, OR IF THEY ARE PARALYSED OR LACK SENSATION ANYWHERE. Feel all the way down the spine. You will feel a row of regular bumps; if there is a gap or step, or the victim has pain at one spot on pressing, they have a back injury. If you're in doubt, treat as one.

LOG ROLL. With three people, move the victim as a unit without twisting or bending, like a log. Don't forget the head; don't turn, drop or bend it. In this fashion, get the victim out of harm's way on to a firm, flat, horizontal surface. Don't move them again until you've got them on to a Neil Robertson stretcher.

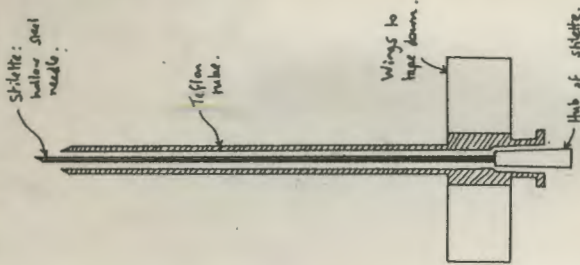
8 CHEST. If the victim has difficulty breathing, or pain on breathing, ENSURE AN AIRWAY and look at the chest (open the clothing; look at both sides). If there is a wound in the chest, PUT A PAD ON IT to stop air leaking in and letting the lungs down. Look at the movements; if one bit goes in while all the rest comes out, and vice versa, PUT A BIG PAD ON THAT BIT to hold it in - that is a "flail segment", a piece of chest wall which has come loose and is moving independently of the rest.

9 DEFORMITY. If either leg is bent out of shape, try and straighten it by pulling down on the foot. Support arms by putting them inside the clothing, or applying a sling if you can. Look for wounds on the limbs; these might connect with the fracture, so it is important to keep crap out of them. Put a pad on them, with pressure if they're bleeding. Splint broken limbs; ideally put the victim on a stretcher.

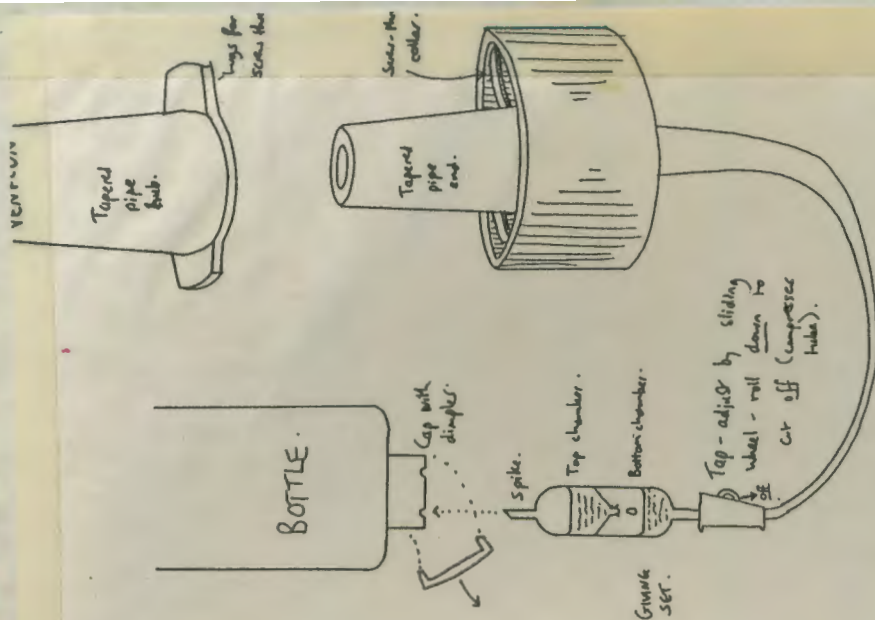
10 HEAT. EXPOSURE IS A RISK especially for immobile victims. Change wet gear for dry if someone else is wearing dryer gear. Cover with a space blanket. Put into an Eskimo or other sleeping bag if you've got one. Give sugary food ONLY if the victim is fully conscious - they might puke and block their AIRWAY. GET THEM OUT.

On the way out - keep talking to them. Keep checking the pulse - if they weren't shocked before, they might become so.

INTRAVENOUS LINES.



Venflon (Might be similar, without the wings).



1 Pull the protective cap off the bottom of the bottle; stick the spike at the top of the giving set through one of the dimples in the bottle.

2 Squeeze the bottom bulb of the giving set a few times to get fluid through, then open the tap and let it run down the tube. If you get air bubbles, hold the pipe vertically and flick it or tap it to get them to the end.

3 Get someone to squeeze the victim's arm to bring the veins up; tap or flick them if they're reluctant. The biggest ones are in the crook of the elbow, but watch - the artery lurks underneath here. Check that what you're going for is a vein and not an artery; if you feel it pulsing when you touch it, it's an artery. Occasionally you find an artery near the surface.

4 Put the skin slightly on the stretch with one hand; with the other, push the Venflon or Medicut into the vein, facing up the arm. When blood comes back into the stilette hub, stop and push the tube up round the stilette into the vein (holding the stilette still).

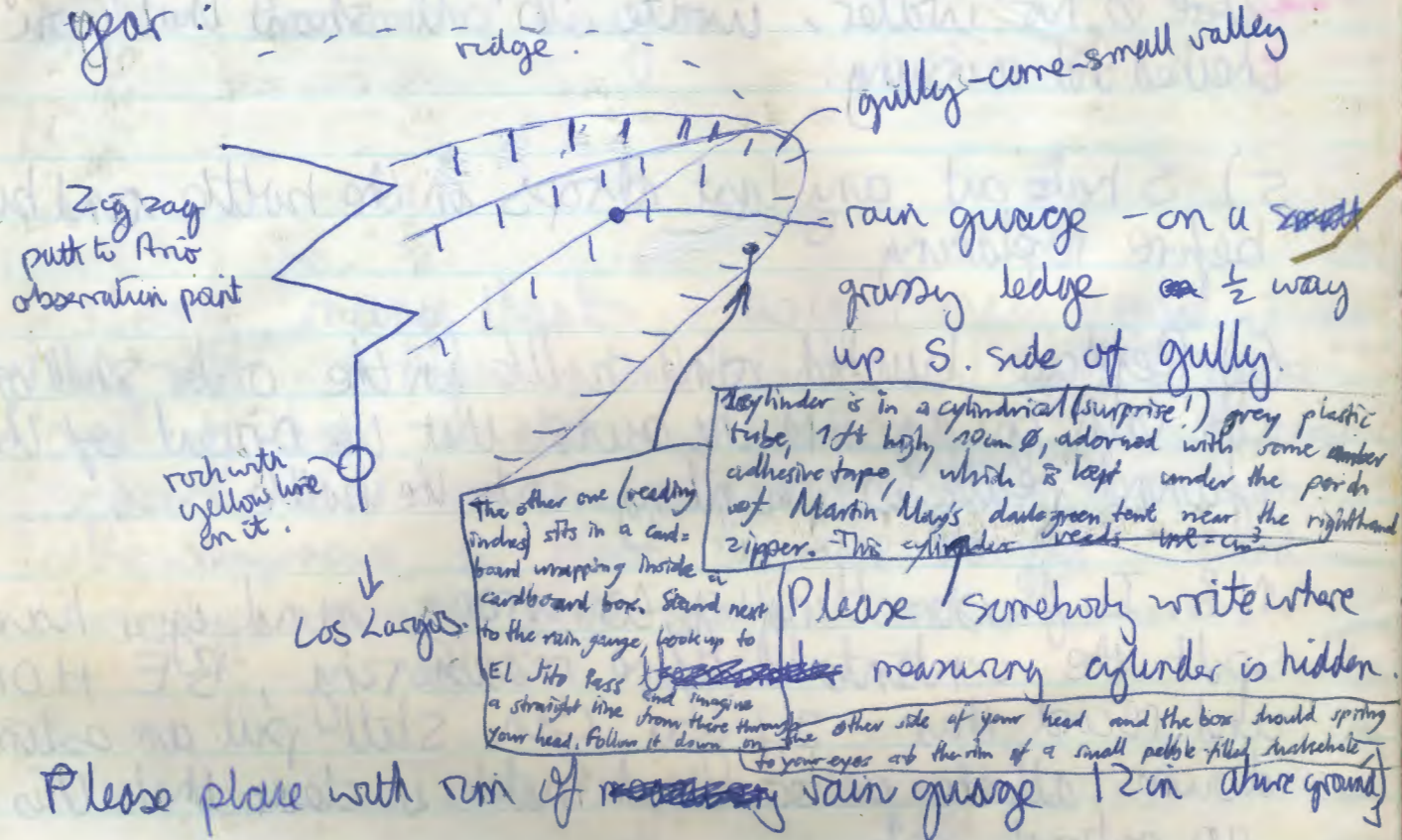
5 Release the arm from your friend's grip. Take the stilette out and connect up the fluid - the tube has a cap on the end which you take off, then push the connector on to the end of the Venflon and twist it to lock it.

6 Tape the Venflon and the tube down to the arm.

Metereological measurements etc.

1) Rain gauge

[I hope that this will be set up in same place as last year:



1) Please read at 0900 h every morning (LOCAL TIME)

If you don't make it by then, or are a little early, please put down the actual time and note whether this would have affected the amount of precipitation recorded.

2) Pour water from bottle (and from bucket in which it sits if there is any in that) into measuring cylinder. Read amount of precipitation from base of meniscus.

4) Record reading in the table below in ml (=cm³)

If rain has fallen, or heavy mist has been felt to precipitate, within the last 24 hrs, but this was insufficient to measure in the measuring cylinder, record 'Tr' (trace) in the table. Otherwise, if there is no water, write '0' to show that you have checked that morning.

5) Shake out any last drops in the bottle and bucket before replacing

6) Replace bucket and bottle in the outer shell of the rain gauge. Make sure that the spout of the funnel really is pointing into the bottle.

N.B. If something goes wrong and you have spilt the contents before measuring, BE HONEST and record this. If you can still put an estimate down, all the better, but make it clear that this is an estimate only.

2) Observations.

Feel free to put any remarks you like about the weather, but you might like to include.

- 1) Average cloud cover over last 24 hrs
- 2) Weather + for how long there was mist and rain
- 3) Temperature (eg 'blazing hot', 'on the chilly side' etc)
- 4) Wind (eg 'v. still', 'gusty', 'howling' etc etc)

Perhaps you were somewhere other than Ariv for most of that day. For instance on the walk up you may have suddenly disappeared into cloud

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and can remember the altitude and time. Do put down details like this but note if the location was not Arco itself.

3) No thermometers this year.

Many, many thanks - as you may know it is likely that Stephen and Hilary will get a paper out of this - that will certainly impress future sponsors. But even one gap in a table does look rather unimpressive, so please do make the effort to record every day, especially if the weather is wet and miserable!

Table begins next page.

(0900h)	(Local time)			
Date	Actual time	ml of Rainfall	Remarks and Observat	
Tue 9/7/85	Day that	you arrived	I hope	
W 10/7		Gauge set up about	11 a.m.	
Th 11/7	9.00	zero (1 small wasp)	Cold night, clear sky, light Warm/Hot morning already set	
F 12/7	9.00	zero (1 beetle)	Warmish hazy night, clear morning sky with breeze, fm NE	
Sat 13/7	0930	Zero (1 fly)	Yesterday still hot. This morning 0900 Wind SE gusting 5 but warm & close.	
Sun 14/7	0.920	0 = 1 live beetle	Cloud level almost exactly at Aris grade	
M 15/7	09:20	Trace	Misty at Aris all day yesterday, today	
Tu 16/7	9-00	0.09 inch	misty/low cloud all day yesterday late evening; this morning low	
W 17/7	0930	Cylinder found knocked over, Est'd as trace Righted cylinder.	Thin layer of low cloud/mist cleared Wind E force 2, W.S.S.	
Th 18/7	1025	Top of cylinder found knocked off, put back on, Est'd 0	Fine day yesterday. Today sky 2/8 two Lages & advancing W.S.S.	
F 19/7	11.00 (wouldn't have affected water amount)	Trace (this would)	Beautifully clear early morning - clogged in was problematic (hence late time - sorry)	
Sat 20/7	9.4 4 (Adds ~1/2 mm!)	23 ml.	Horrible dense mist actually properly raised during	
Sun 21/7	12 ish	0.02 inches	Light mist last night. Today lovely sunny & zero	
M 22/7	1:30 pm Sorry. I Spent 18 hrs down 3/5	Nil	Boiling hot & cloudless yesterday morning There appear to be no clouds at any level	
Tu 23/7	0930	Nil	Boiling hot with cloudless sky yesterday. Mirador. Second cloud top at about level of	
W 24/7				
Th 25/7	0910	Nil (but see comments)	Squally conditions at Lages Aris hiked ~2200 from patch	

refer to previous 24 hours unless dated.

mist/rain (4 am)
Sun gauge \rightarrow found bottle gone and 1 cm³ in the inner metal container, transferred this to the outer container for later measuring.
Sunny ~~all~~ all day sunrise - sunset. (27/7) reading in Los Lagos Book SWR

depression by 1700. Lenticular clouds over Arto. Wind force 5 N. MIST filled Arto at 2215 27/7 from S (Cares) 29/7
Sun peeping through the trees. Wind gusts 5 from S-SW. Arto camp had had some rain around 5 am 29/7
@ 2200m moving E rapidly. Wind 6-7 SW. Log entry for measuring cylinder locations if you don't know than yet!
torrential rainstorm! (until 10 pm)

No clouds at all below Arto. Marvellous view of the lowlands from Jito pass.
appears in clouds. More rain during the evening.

whereas Cares gorge, Vega de Arto, Valley beyond El Jito towards ^(Cold) Lagos 10 am 30/7; faint drizzle at campsite. Later rain.
misty & misting over - dense fog at last. Some more rain.

cumulus clinging to various mountain-sides. Sunny. View from Jito to Lagos hazy. Clouds rising from Cares. Little wind.
totally in clouds. Following night: moon comes through -
of clouds with upper bound ~1800-1900m. Cold. Wind 0-1.

alley towards evening. Clear skies.

morning. High wispy clouds. Another cloud bank at level of Xitu ridge
(4/8/85) Light wind (NE with many eddies).

nasty cold gusts of wind.

les of moonshine) all night and most of yesterday. Cold. Gusty wind 0-5.
a bit in the afternoon. Sun comes out at last and rain stops ~6pm. Very cold.
later clear blue sky, hot sun (7/8/85). Wind force 2.

given it was very hot, clear blueskies etc, like it was below.
up and found the gauge o.k. but how the ming cylinder ^{has managed to} survive the assaults by the cows is anyone's guess. Y.W.
glaring hot. Wind 1N,
Fresh breeze 3-4 NW westerly.
Not much freeze (1-2). Dry.

Date (0900)	(Local time) Actual time	Rainfall/ml	Remarks + Observations
F 26/7	~ 9am	0.01"	Horrible Cluggy day with haze Will have a look at
Sat 27/7	09.05	0.01"	Clear Sunny morning. Haze low so really Thick cumulostratus ^{up} to rim of Arrio
Sun 28/7	09.40	1.5 ml (no rain since 9am)	28/7 morning: Clouds 7/8 @ 3000m (Paisa Santa visible) with 3pm: stationary cirrus (at 3000m?) way above nasty grey cumulus Cooling down (77°C?) 28/7 5pm: drizzle turns into
M 29/7	09.20 (no rain since 9am)	154. ml !! de two drowned flies	28/7 morning: Clouds 7/8 @ 2200m. Cold, W Wind 2 S. Afternoon, several showers. 3pm Vega de Arrio dis- 29/7
Tu 30/7	09.30 (no rain since 9am)	112. ml	30/7 morning: Sunrise soon swallowed by 8/8 clouds descending crowds 30/7 afternoon: clearing up a bit for some sunshine. Evening
Wed 31/7	09.30 (no rain since 9am)	Found funnel & bottle pulled out & lying 3ft from the bucket. Total contents of funnel, bottle & bucket about 2.5ml. Puzzling since we've had at least 30ml rain at Arrio. Perhaps the cows have licked it out.	31/7 morning: 1/8 cirrus plus bits of 31/7 afternoon: complete
Th 1/8	09.00	Rain gauge leached over. Reassembled it and wedged bucket with pebbles. Est'd as Trace.	1/8 3/8 clouds @ 1000m. Lages under separate layer of
F 2/8	10.00	0.01"	Clear day but with mist over in rain gauge Fairly cool night.
Sat 3/8	08.45	0 (funnel top knocked off)	Lot of dew overnight. Clear but fairly chilly
Sun 4/8	09.32	Trace	Blue sky, hot sun. High cirrostratus
M 5/8	09.30 (same) 10.00 read again	2ml about 2/3 of which actually belong into tomorrow's reading by J.H. - 6/10 of smallest	Rain beginning 8 ⁴⁵ am, completely inside a cloudy division on the inner cylinder (0.006")
Tu 6/8	09.00	153 ml	Has been raining (with very brief interludes 6/8. rain continues all morning. Clears up
W 7/8	1300	0.395 in	Ground frost. High altocumulus early,
Th 8/8	1030	0 (one flower bud! funnel top knocked off)	No one was here, after Lages but 1 8/8; 9 ²⁰ pm: checked Met-station on the way
F 9/8	0940	0	cloudless, sunny, hazy in the distance 9/8 12noon: Some cirri & alto cumuli gathering.
Sat 10/8	1417	not read	Overcast 8/8, thin cloud at level of Taltaya.
Sun 11/8		Phil Sargent should have read.	

(5m visibility, apart from the still illuminated Refugio) but ^{on} the walk up down Lago, ~~that been~~ 20m visibility or more on the average. Hardly any wind, only 1E right on the pro pass.
 Slightly misted, cool wind 13 SE.

cloudy all day.

08:00	0.35	1/8
08:30	0.35	1/8
09:00	0.35	1/8
09:30	0.35	1/8
10:00	0.35	1/8
10:30	0.35	1/8
11:00	0.35	1/8
11:30	0.35	1/8
12:00	0.35	1/8
12:30	0.35	1/8
13:00	0.35	1/8
13:30	0.35	1/8
14:00	0.35	1/8
14:30	0.35	1/8
15:00	0.35	1/8
15:30	0.35	1/8
16:00	0.35	1/8
16:30	0.35	1/8
17:00	0.35	1/8
17:30	0.35	1/8
18:00	0.35	1/8
18:30	0.35	1/8
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20:30	0.35	1/8
21:00	0.35	1/8
21:30	0.35	1/8
22:00	0.35	1/8
22:30	0.35	1/8
23:00	0.35	1/8
23:30	0.35	1/8
00:00	0.35	1/8

Date (0900)	(Local time) Actual time	Rainfall/ml	Remarks + Observations
M 12/8		John Hatch should have read	
Tu 13/8		gill reads on way to Top Camp	1218 i 11pm: Vega de Arrio in dense fog 830am: S/Cirrus & Cirrostratus, sunny, mfd.
W 14/8			
Th 15/8			
F 16/8			
Sat 17/8	1339	trace.	From top camp it looked like it was with occasional hazy sunshine
Sun 18/8			
M 19/8			
Tu 20/8			
W 21/8			
Th 22/8			

(BII)

INFECTED OR RED EYES are usually due to a conjunctivitis caused by a bacterium. Optrex is not very useful. Use Polyfax or tetracycline eye ointment 3 or 4 times a day. Put a little ~~snake of~~ cream on the turned down lower eyelid. Put the upper eyelid over it and massage gently. This should clear the infection in the course of a couple of days.

ATHLETES FOOT This can be particularly tiresome if you have sweaty feet. Wash your feet thoroughly and dust the feet and socks with Mycil or some similar antifungal dusting powder.

FLEAS AND LICE Dust your clothes and sleeping bag with flea powder (kills pests on pets and undergraduates!). Go to the nearest pet shop and ask for dog flea powder. Hunt for fleas and lice on you. If badly bitten use Betnovate or Synalar cream or Eurax cream.

TAPEWORMS AND ROUNDWORMS For tapeworm take Yomesan (niclomaside 500 mg) four tablets, ~~chew well~~ and wash down with water. A cascara tablet should be taken as a purgative. For roundworm take Vermox (mebendazole 100 mg) one night and morning for three days.

AMOEBIASIS If you think you have got amoebiasis (bloody diarrhoea) take tinidazole 2 gms (four tablets) every morning for three days and then Furamide, one tablet (of 500 mgs) three times a day for five days.

HIGH ALTITUDE Note that above 8-10,000 feet the contents of full tubes of ointment will shoot out under pressure. Unscrew cap with care. You may be given Diamox 500 mgs twice a day to counteract mountain sickness.

GENERAL NOTE

It is important that drugs not used are handed in to me for use of future expeditions, or burnt. They could be dangerous particularly for children and in foreign parts any expedition refuse is often avidly collected by the locals.

Bent Juel-Jensen.
University of Oxford.
Trinity, 1984.

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Betnovate use with Care in rather
ECZEMA With irritating skin conditions, use ~~Betnovate cream~~ locally or Vioform and hydrocortisone cream. Both contain steroid and an antiseptic.

DISINFECTANTS For cuts and scratches use tincture of iodine unless you are hypersensitive to iodine. Bigger cuts may be washed out with Savlon. A sachet of Savlon concentrate will make a pint of disinfectant ready for use.

MOTION SICKNESS Marzine tablets, 1 every two to four hours, or Dramamine tablets, 1 every two to four hours, help most people.

SORE THROATS Most are not due to bacteria and a soothing gargle with some soluble Aspirin (Disprin) usually takes the worst agony away. If the throat is dark red and very sore it is possible you may have a bacterial infection and if you have a fever, take clindamycin (150 mg capsule) or erythromycin 1 four times a day for five days.

SLEEPING TABLETS You have been given ^{Rohypidol} ~~Mogadon~~ (nitrazepan) 1 mg. One will send the average adult off to sleep. If one does not work you can safely take two or even three.

N.B. Keep these tablets safely and ensure that they do not fall into the hands of children or irresponsible people.

HEADACHES AND OTHER PAINS AND ACHES You have been given Parasetol (paracetamol and ~~codeine phosphate~~) tablets. Each tablet is in tinfoil. Dissolve 2 tablets in a little sterilized water and swallow. Do not eat tablets dry, the tablets will fizz all the way down if you do.

As an alternative use soluble aspirin, 2 tablets, which may be taken every four hours. Cut the dose if you get ringing in the ears.

INDIGESTION Use ^{Gaviscon} ~~Aten~~ tablets, chew or suck one or two as often as necessary.

SUNBURN Avoid going into blazing sunshine or working by the sea unless you have used Uvistat ointment on the exposed part of your body, and pomade on your lips.

MOSQUITOES AND FLIES If you are in an area where there are tsetse flies, black flies (simulium damnosum), or a lot of anopheles or aedes, you must use a mosquito net. Both in the Tropics and Arctic and Antarctic mosquitoes can be a nuisance. They will descend in their millions from nowhere and you should have a good mosquito repellent. The best is a mixture of 2-ethyl-1-3-hexandiol (94 G/l), 56.4 ml and N, N-diethyl-m-tolumide (99.7 G/l) 6.3 ml and industrial methylated spirit 66 O.P. to 1 litre. It can be bought in America and Sweden. The Swedish variety is known as Djungel Olja 3 x 6. Do not put it in the eyes or in the mouth.

In some parts of the Arctic tiny flies can be a great nuisance, crawling into the ears, eyes, mouth and nose. Insect repellent does not work on them, but the local population usually will be able to advise you. In Greenland you should go to the Royal Greenland Trading Company (KGH) and buy a very fine mesh shopping bag, put it over your head and wear mittens. This works. Do not put a polythene bag over your head: you stand a reasonable chance of asphyxiating very rapidly.

TYPHUS If you are going to areas where you are likely to encounter rickettsial disease (epidemic typhus, tick typhus, scrub typhus, Rocky Mountain spotted fever) you may be given a supply of tetracycline. If you get a fever (particularly following a tick bite) take two, 4 times a day for a week, and then one 4 times a day for a further week.

IMPORTANT INSTRUCTIONS

*Thompson
- W. D. S. P. C.
P. H. W. L. :- 12*

DIARRHOEA. Much of the diarrhoea encountered in foreign parts is due to change of diet. Some is due to infection. Prevention is important and half the battle is won by taking simple precautions. Travellers often show a remarkable lack of common sense. Spanish pears may be luscious, but if a Spaniard eats 8 large Spanish pears he will get diarrhoea, so eat fruit in moderation. If you do eat fresh vegetables or fruit make sure that these are washed in water purified with Sterotabs (or Puritabs). Salads that include green lettuce are particularly hazardous. Vegetables are often manured with human dung, and those with a large surface (such as lettuce) are particularly dangerous. You have a little free acid in your stomach, it will cope with a few nasty germs, but not with a lot. Cucumber and tomato salads are relatively safe. If you get diarrhoea, take codeine phosphate, two 30 mg tablets, every 4 hours until the diarrhoea has stopped, or take Lomotil, 4 tablets at once, and then 2 tablets four hourly until the diarrhoea has stopped. You may have been given Imodium (loperamide): take two capsules at once, and then one every time you have a motion until you seize up. If none of these stop the diarrhoea and you are feeling ill, and particularly if you are passing stools with blood and mucus, take Septrin or Bactrim (cotrimoxazole) ~~two~~ tablet twice a day for five days. You may have been given Amoxil (amoxycillin) 500 mg capsule. Take ~~two~~ ^{two}, four times a day for five days. If this does not clear the diarrhoea you must seek medical help. Septrin or Bactrim should not be taken by people that are hypersensitive to sulphonamide. Amoxil should not be taken by people who are hypersensitive to penicillin.

OTHER INFECTIONS Do not use antimicrobials recklessly. If you have boils and a raised temperature, or infected wounds, or you think you have pneumonia or bronchitis it is reasonable to take a drug. For boils and infected wounds use first clindamycin. The capsules are 150 mg. Take one tablet four times a day. If you are no better at the end of 72 hours, take Septrin (or Bactrim) two tablets (or capsules) twice a day for five days. (Remember that the latter must not be given to people who are hypersensitive to sulpha drugs). Do not give both drugs at once. If you are in doubt you must seek medical advice.

Don't use clindamycin it's not nice really.

The white, get out, best, it's not.

Some of you may be given flucloxacillin (Floxapen). This is also useful for infected wounds, boils. Take one capsule (250 mg) four times a day. If the infection is not better after three days go on to Septrin or Bactrim as above.

HEAT EXHAUSTION AND SUNSTROKE. Keep your water and salt requirements in balance (see other sheet).

ANTI-HISTAMINES These drugs suppress allergic reactions of various sorts and are useful in suppressing nettle-rash, itchy skin conditions, hay fever, and to some extent mild asthmatic wheeze. Remember that they all, but to a varying extent, tend to make you sleepy. Do not drive if you are at all drowsy. You will have two drugs, Pro-Actadil and Phenergan. Each tablet of the former is of 10 mg, the latter 10 mg or 25 mg.

PRO-ACTADIL is suitable for use in the day time. One once a day may be adequate but one may be taken at night and morning if necessary.

PHENERGAN The most powerful antihistamine, is likely to make you sleepy, so take preferably at night. Do not take if you are driving. The 25 mg tablet is very potent.

DRUGS - HOW TO USE THEM

ACROMYCIN Tetracycline eye ointment. Only use this if your eye is actually producing pus (ugh). Apply to inside of eyelids 3x /day.

AMOXIL Chest infections, with green or yellow sputum only. 500mg 3x /day for five days at least. Might also work for cystitis but Trimethoprim/Septin is better. Also use for cellulitis (red, v. inflamed & sore skin patches around cuts or grazes).

BACTRIM Septin. For Cystitis. One tablet twice daily, FOR FIVE TO SEVEN DAYS. Two tabs for bad goes.

BETNOVATE and BETNOVATE-C Powerful steroid ointment. DO NOT USE except under qualified supervision. Do not use for rashes. Do not use for burns.

CODEINE PHOSPHATE For shits. As Lomotil. Also - it's a good painkiller - better than aspirin / paracetamol (but it bungs you up!).

DAKTARIN For really nasty jock-rot & skin rashes which can't be cured any other way (ie by leaving them alone). Use as per leaflet in box.

DALACIN An antibiotic. Broad spectrum, effective but can cause unpleasant colitis (bloody shits+). Use other antibiotics (eg. Amoxil/Septin) rather than this.

DIOBALYTE For the shits. Make up and drink to replace lost fluid.
If you run out, make your own:
1 litre boiled water
1 tablespoon sugar
1 teaspoon salt

Cheers!

EVRAX Use for itchy rashes, NOT if they're oozing or blistered.

FASIGYN Tinidazole. For amoebiasis - chronic, really appalling bloody foul shits which won't go away any other way. Take as per directed on JJ's sheet.

FLAGYL Specialised antibiotic, qualified use only. One tablet 3x /day, for 7-10 days. NO ALCOHOL.
For: - certain types of diarrhoea or vaginitis (thrush).

FLOXAPEN Antibiotic for use only for Amoxil-resistant infection, under qualified supervision.
Weaker than Amoxil but works on more bugs. One or two capsules, 3x /day, for 5-7 days.

CAVISCAN Makes a sort of raft on the contents of your stomach, which plugs up your gullet and stops honk coming up when you lie down. Use for Heartburn.
Also said to be good for hangovers, though I (Tom) haven't tried it and can't imagine why it might work. (ps. I now have and it doesn't!)

IPRAL See Trimethoprim.

LOMOTIL For shits, if it's really inconvenient. If you've got the shits, something in there wants to come out. Use with caution and not for long periods (ie. more than a few days).

MARZINE Prevents Travel sickness.

MYCIL First remedy for athlete's foot. Use as directed, with the prickly heat powder.
Use for foot or jock - rot.
If doesn't work after a few days, try Daktarin.

PIBITON, PROACTIL, PHENERGAN Antihistamines (for hay fever).
Use pibiton first, then (if it doesn't work) Proactil, then (ditto) phenergan.
Phenergan is also good for a night's sleep, if you don't mind sleeping the day after as well.
DO NOT MIX WITH DRINKING OR DRIVING

POLYFAX Eye ointment. For milder nasties than achromycin; apply to inside of eyelids 3x /day.

ROHRPNOL Sleeping pills. Don't work for pain.

TRIMETHOPRIM (Ipral) As Bactrim (but if you start on one, don't change to the other). One tablet twice daily for 5-7 days.

VERMOX For worm infestations, not very likely in Spain.

(BIS)

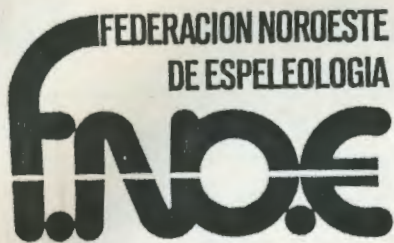
2

CAVER - HEAL THYSELF !
A guide to the medicines herein

WARNING- A lot of the stuff in this box is powerful juju indeed. Refer to the "Drugs - how to use them" sheet BEFORE taking anything other than aspirin ! Items marked ** are quite drastic and should only be taken in dire emergency, after consulting a doctor. If it's that bad, maybe you should be in hospital.

AILMENT	DRUG
SHITS	Codeine Phosphate Lomotil Dioralyte (replaces lost fluid) Fasigyn **
CHUNDERS	Gaviscon Marzine (?)
PAIN	Aspirin Paracetamol Watch it ! Aspirin causes gut bleeding and overdose of Paracetamol is VERY NASTY indeed. Codeine Phosphate (?)
FESTERS	Try Savlon FIRST Mycil Daktarin **
RASHES	Try Savlon FIRST Evrax
BURNS	Cold water, use burn bags, or leave exposed to harden. Keep clean (Savlon).
NASTY EYES	Polyfax Acromycin
HAY FEVER	Piriton Proactil Phenergan
ANTIBIOTICS	None of these to be used trivially. Amoxil Bactrim Trimethoprim Ipral Dalacin ** Flagyl ** Floaxapen **
ECZEMA	Betnovate ** (see Urs if no Doc.)
CAN'T SLEEP	Alcohol ? Oh, all right, try Rohypnol Phenergan ?
WORMS !	Vermox

PERMIS



OXFORD UNIVERSITY CAVE CLUB
Steven G. Roberts
OXFORD
INGLATERRA

FEDERACION NO. DE ESPELEOLOGIA
c/ Foncalada, 15, 8ª izda.
33002 - OVIEDO

24/6/85

Examinada la solicitud presentada por el O.U.C.C. para la realización de trabajos espeleológicos durante 1985 en la provincia de Asturias, dentro de los concejos de Onís y Cangas de Onís, la Asamblea Territorial de esta Federación celebrada el 25 de Mayo del presente año ha acordado la autorización para los mismos.

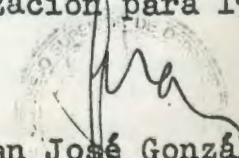
DURACION: todo el año 1985 (Campaña de verano del 10 de Julio al 22 de Agosto, y cualquier otra posible actividad dentro del período anual indicado).

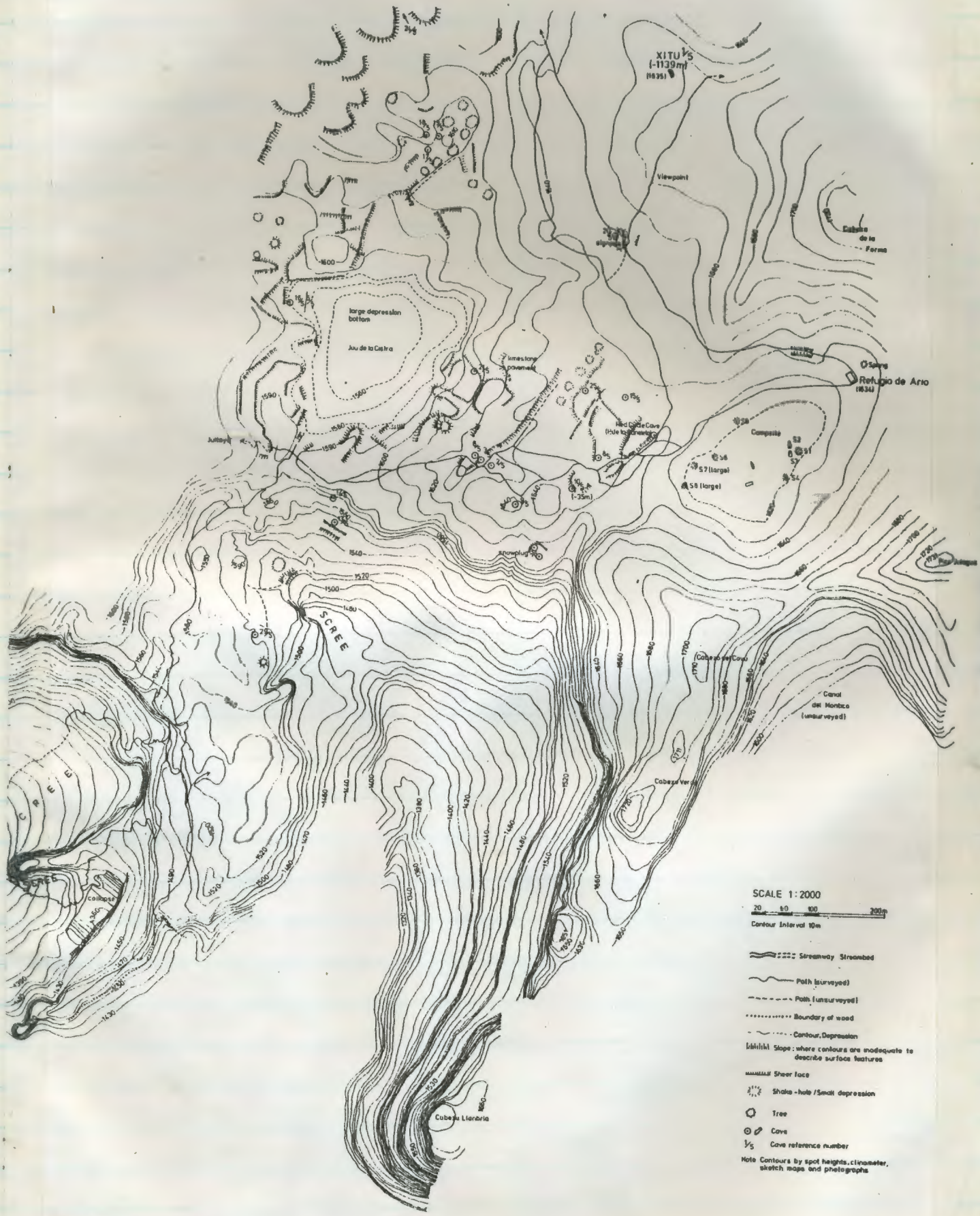
ZONA : Delimitada topográficamente en fotocopia adjunta del plano 1/50.000 del IGN, dentro del Macizo Occidental de los Picos de Europa y Parque Nacional de la Montaña de Covadonga. Al N. de la divisoria provincial con León, entre las cumbres de la Punta Gregoriana y Cabeza Llabria, cerrando el contorno la Pica la Jorcada, Conjurtao, pico Gustuteru, Cabeza la Forma, Cabeza Julagua y Cabeza Verde.

La Entidad solicitante debe cumplir las normas administrativas relacionadas con el Parque Nacional, en todo lo tocante a acampadas y respeto del medio exterior y subterráneo. Asimismo, en el plazo de seis meses tras la finalización de los trabajos, remitirá a esta F.NO.E. un informe completo de los estudios realizados, que incluirá:

- Coordenadas geográficas de cada cavidad, y/o localización precisa de las mismas sobre un plano 1/50.000 o más detallado.
- Plano topográfico (cuando se haya realizado) y descripción de las cavidades, junto a cualquier otro dato o estudio complementario de interés para la elaboración del Catálogo de Cavidades y un mejor conocimiento de la zona.

El envío de este informe es condición previa e imprescindible a una posible renovación de la autorización para 1986.

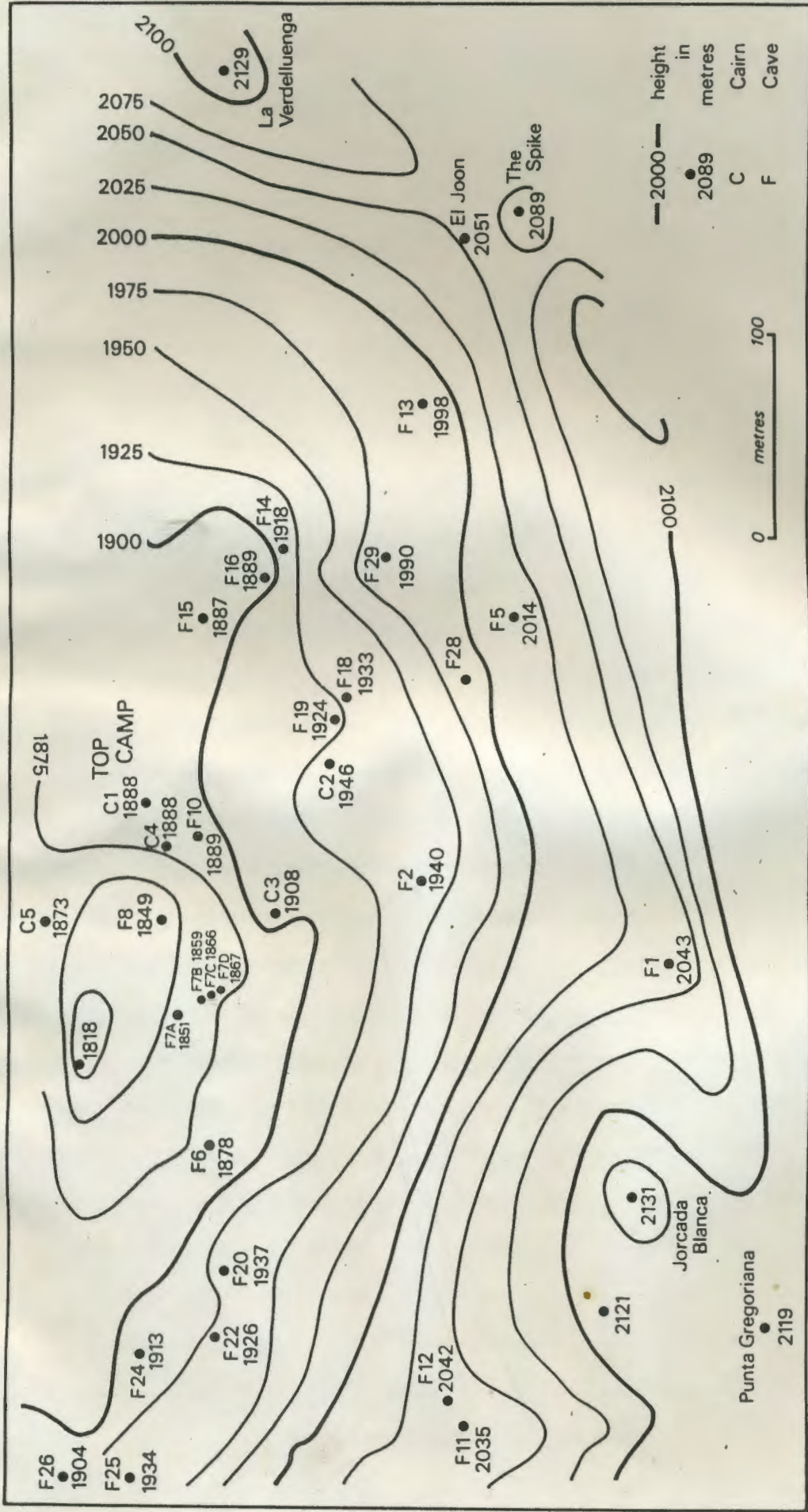

Juan José González Suárez



SCALE 1:2000
 20 40 60 80 200m
 Contour Interval 10m

- Streamway Streambed
- Path (surveyed)
- Path (unsurveyed)
- Boundary of wood
- Contour, Depression
- Slope: where contours are inadequate to describe surface features
- Shear face
- Shale-hole / Small depression
- Tree
- Cave
- Cave reference number

Note Contours by spot heights, clinometer, sketch maps and photographs



Location of caves around Top Camp

NAME	(B21)	BEERS CANS	VINO	LITROS
SGR			675 pd	2 to be accounted for
D.R.	 		2380 owed	15 July pd exp.
P.R.			 1310 owed	225/4 900 pd
G.M.			4	
M May			410 owed	
W.S.			860 owed	pd exp
D.H.			635 pd	
SM			450 owed	pd exp
R.G.			860 owed	pd exp
P.B.			225 pd.	
S.W.			225 owed	pd exp
P.D.			225 owed	
A.D.			225 owed	pd exp
FW			 1985 Pd.	
SWR SCR			225 owed	pd exp
GN			450 owed	
I.W.			185 owed	pd exp
SS D			185 owed	pd exp
SDW			450 owed	pd exp.
UC			450 pd	
JDG			225 pd	
PMS			225 pd	

Fred says this should be "UR"
 FRED CAN FUCK OFF
 U

16

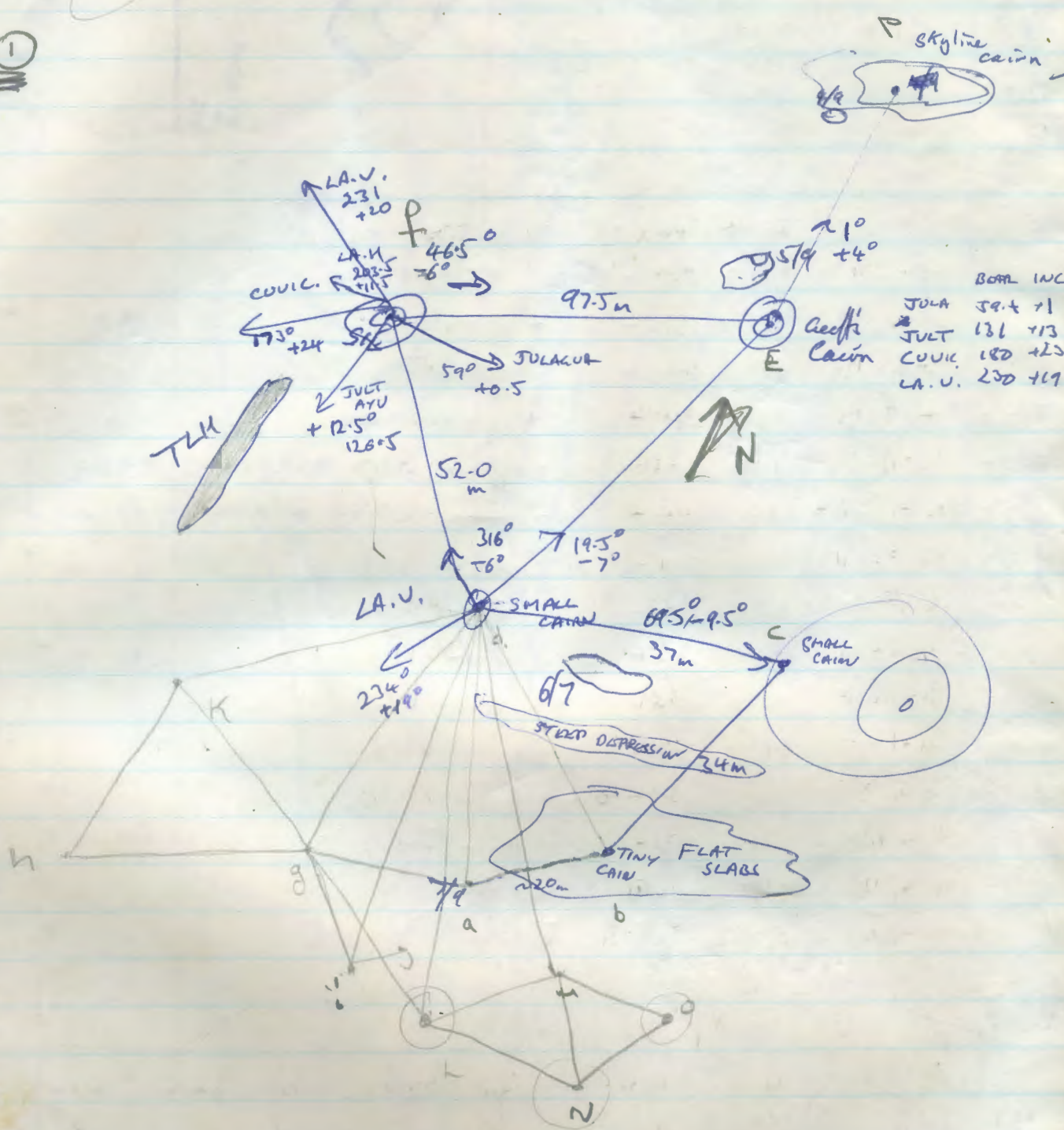
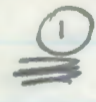
46

185			
<u>1480</u>	185	225	185
84		5	
900		<u>7125</u>	
		12	
2380		185	
		<u>1310</u>	
225			
<u>185</u>			
.10			
.10			

185	235
<u>3</u>	<u>3</u>
675	675
185	185
<u>860</u>	<u>860</u>
1	1

1322

Surface Surveys of around Area 9.



	BORE	INC
JOLA	59.4	+1
JULT	131	+13
COVIC.	180	+23
LA.V.	230	+19

	Beat	INC
A → B	45	-5
G → A	31	-10
G → H	190	+20
i → G	267	-12
δ → v	215	+3
ū → D	317	-5

13 INC

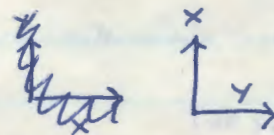
JULA. 645 +1
 JULY. 135 +12
 CIVIC. 178 +20
 LA.H. 202 +8

	BEAR	INC	BEAR	INC	BEAR	INC	BEAR	INC
	138	-2	114	+9	21	-7	341.5	+0
	316	-9	284	-18	4	-11	33	-8
	302.5	-13	261	+11.5	267	-4	299.5	+12.5
	319	+7.5	241	-3	271.5	+3		

Bearings	H		S		L		O	
	Bear	INC	Bear	INC	Bear	INC	Bear	INC
Selagua	58	+1	-	-	55	-1	52.5	+1
Tulkay	181	+32	188	+34	123	13	124.5	+24.5
Covichetti	238	+20	243	+22	23	23	-	-8
La Verd!	321	+9	319	+9	237.5	21	239	+22.5

276

$r = \text{dist}$
 $\theta = \text{bearing}$
 $\phi = \text{inclination}$



$x = \text{North}$	$x = r \sin \theta \cos \phi$
$y = \text{East}$	$y = r \sin \theta \sin \phi$
$z = \text{down UP}$	$z = r \cos \phi$
$\text{Ext} = \text{extended elevation}$	$\text{Ext} = r \cos \phi$

How to set up Geoff's calculator for converting spherical coordinates into cartesian coordinates, according to the above conventions.

1 Programming - If the program is not yet stored,

- (1.1) 2nd CP clears the program storage
- $\text{2nd PART } 1 \Sigma$ defines program/memory space division (displays "415.71")
- LRN switches to programming mode (displays "ST")

(1.2) The program:

- $\text{LBL } A$
- $\text{RCL } 01$
- $x \rightleftharpoons t$
- $\text{RCL } 03$
- 2nd PAR
- R/S
- $x \rightleftharpoons t$
- R/S
- $x \rightleftharpoons t$
- $\text{RCL } 02$
- 2nd PAR
- R/S
- $x \rightleftharpoons t$
- R/S
- RST

(press the figure keys slowly the display must show "01" here)

LRN switches back to calculating mode

2 Calculating -

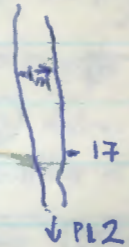
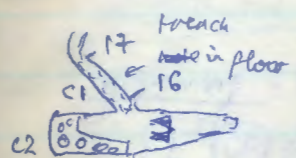
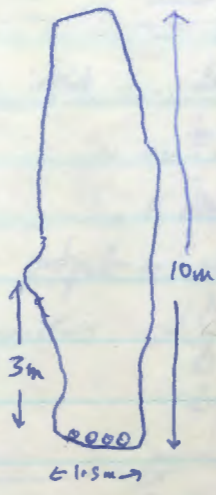
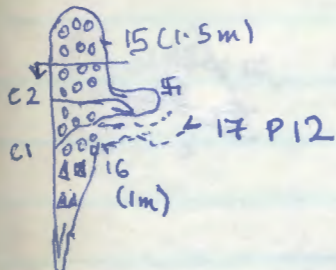
- (2.1) enter length of leg
- (2.2) $\text{STD } 01$
- (2.3) enter bearing
- (2.4) $\text{STD } 02$
- (2.5) enter inclination (+ = up, - = down)
- (2.6) $\text{F/D } 03$
- (2.7) A shows Δz
- R/S shows ext. elev.

q/n 15.7-85
see over for more comfortable version

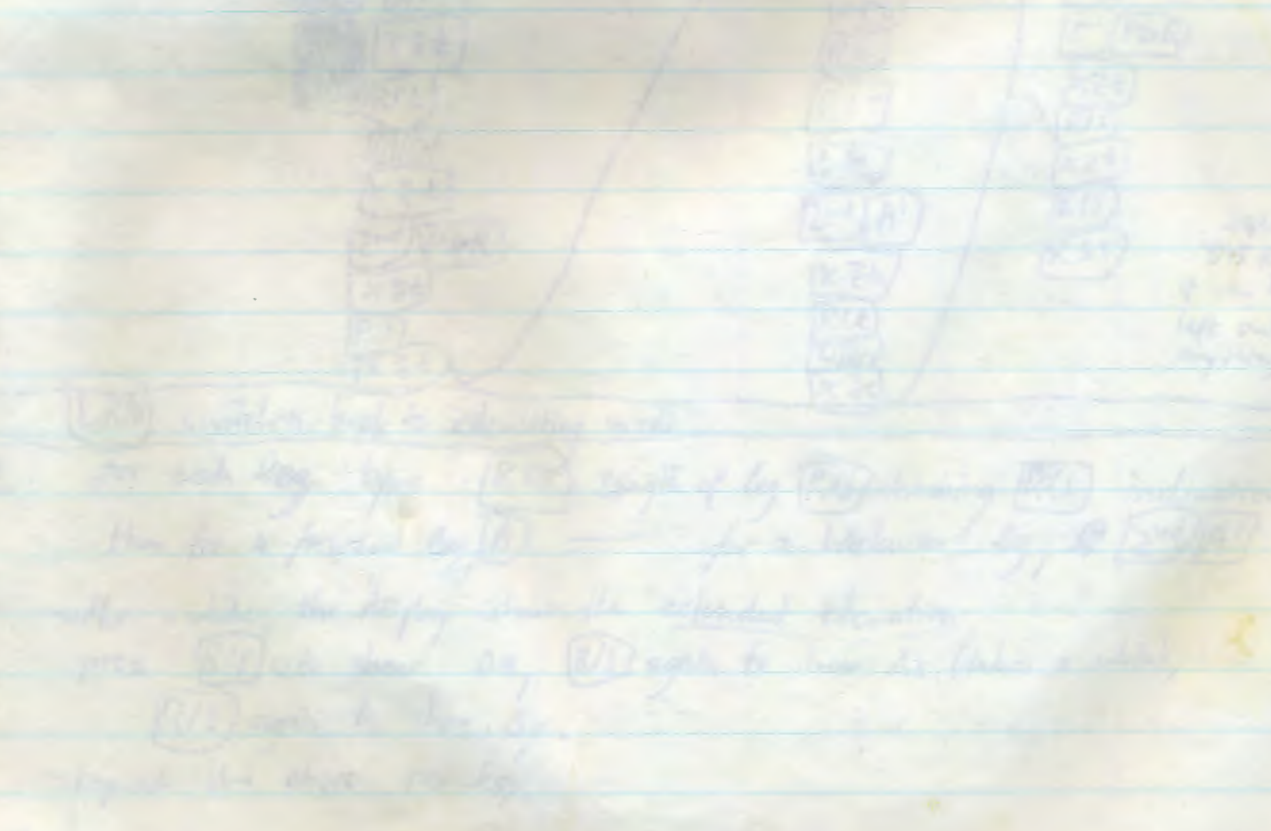
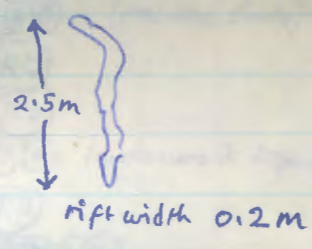
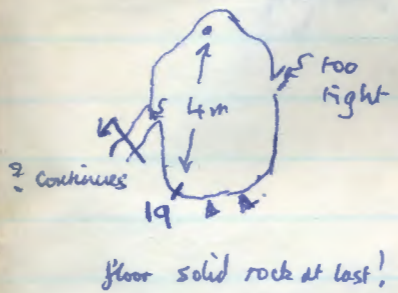
- R/S shows Δy
- R/S shows Δx
- (2.8) for reverse bearings, note the $\Delta x, \Delta y, \Delta z$ each with the opposite sign.
- (2.9) repeat the above (as from 2.1) for each leg.

~~sketches from~~

3/5 Alternative Route (cont-4)



NB. Station 18 is on a ledge halfway down the pitch.



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Surface Survey of Area 9

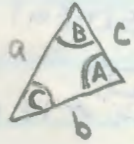
(1)

Using letter notation as in (1)
sine rule

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

cosine rule

$$a^2 = b^2 + c^2 - 2bc \cos A$$



Survey of relative positions is no peak readings.

Points	Horizontal Dist	Vertical Dist	Bearing
F → E	97	-10	46.5
D → F	51.7	-5.4	316

(2)

Conversion of raw surface data into cartesian coordinates, release 1.2
 (using Geoff's calculator) (1329)

Conventions:

input - length of leg in m
 bearing in $^{\circ}$
 inclination in $^{\circ}$, positive = up, negative = down

output - extended elevation in m (always positive)

Δz
 Δx
 Δy } in m: positive x going north
 positive y going east
 positive z going up

Programming: (if the program isn't already stored)

- 2nd CP clears program memory
- 2nd PART (1) (2) defines prog. memory space (displays "415.11")
- LRN switches to program mode (displays "ST")

The program:

STD
 00 (press keys slowly)
 RIS
 STD
 01 (make sure it displays "004 01" here)
 RIS
~~LBL~~
~~A~~
~~RCL~~
~~XZT~~
 RCL
 00
 XZT
 2nd PDR
 XZT
 RIS
 XZT

RIS
 RCL
 01
 2nd PDR
 XZT
 RIS
 XZT
 RIS
 RST
 LBL
 2nd A'
 XZT
 RCL
 00
 XZT

2nd PDR
 XZT
 RIS
 XZT
 +/-
 +/-
 RIS
 RCL
 01
 2nd PDR
 XZT
 RIS
 XZT
 RIS
 RST

displays "045 RST" if you haven't left out anything

LRN switches back to calculating mode

Use: for each leg type RST length of leg RIS bearing RIS inclination
 then for a forward leg, A — for a backward leg, 2nd A'

- after a while, the display shows the extended elevation.
- press RIS to show Δz , RIS again to show Δx (takes a while),
- RIS again to show Δy .
- repeat the above per leg.

Don't press any other keys between these or you'll get funny results.

530

R. Rose Survey station 315 from
to Wingerts Riff to Kater 20/7/85

Station	Time	Compass	Clino	Stn Ht etc (Approx)
2 → 1	13/22 ^{8/39}	131/15	+24	1/45 ①
2 → 3	6/19	311	-44	4/0 ③
4 → 3	4/15	063	+62	4/95 ④
4 → 5	1/51	041	-31	1/00 ⑤
6 → 5	3/69	111	+13	0/8 ⑥
6 → 7	1/25	260	+9	⑦ 0/40 from helay.
8 → 7	20/11	-	+90	⑧ 1/15
9 → 8	14/66	136	-4	
9 → 10	37/50	-	-90	⑩ 1/60
11 → 10	13/14	325	+24	⑪ 4/100
11 → 12	3/30	166	-35	⑫ 2/100
13 → 12	5/63	279	-13	⑬ 4/100
13 → 14	5/55	171	-29	⑭ 4/100
15 → 14	3/48	330	+75	⑮ 5/60
16 → 15	2/14	237	-2	⑯ 1/70
16 → 17	1/29	345	0	⑰ 1/90
17 → 18	1/08	118	-7	⑱ 1/80
19 → 18	1/14	339	+12	⑲ 1/70
20 → 19	3/46	261	+5	⑳ 1/60
20 → 21	2/08	046	+45	㉑ 3/100
21 → 22	3/21	100	-4	㉒ 4/00
22 → 23	2/32	032	+1	—
23 → 24	4/02	085	-35	㉔ 7/50
25 → 24	8/24	281	+32	㉕ 4/100
25 → 26	3/83	135	-26	㉖ 2/70
27 → 26	4/05	353	+10	㉗ 10/30
27 → 28	9/62	144	-54	㉘ 8/20
29 → 28	8/72	300	+70	㉙ 4/00
29 → 30	27/22	114	-74	㉚ 1/50

Calculated with the ~~and~~ ~~Graph~~ ~~add~~ Program

ExVEL	Δz	Δx	x_{cum}	Δy	y_{cum}
7.66	-3.41	5.082	502	-5.78	-5.78
4.96	-4.79	3.26	828	-3.75	-9.53
2.32	-4.37	-1.05	723	-2.07	-11.6
1.29	-0.78	0.98	821	0.95	-10.75
3.60	-0.83	1.29	9.5	-3.36	-14.11
1.23	0.14	-0.21	924	-1.22	-15.33
0	-20.11	0		0	-15.33
14.6	1.02	10.52	19.81	-10.16	-25.49
0	-37.50	0	19.81	0	-25.49
12	-5.34	-9.83	9.98	6.89	-18.6
2.7	-1.89	-2.62	736	0.65	-17.95
5.99	1.27	-4.80	2.56	-2.66	-20.61
4.85	-2.64	-4.79	-223	0.76	-19.85
0.9	-3.36	-6.78	-9.01	0.45	-19.4
2.19	0.075	1.16	-7.91	1.79	-17.6
1.29	0	1.24	-8.67	-0.33	-17.93
1.07	-0.13	-0.503	-7.173	0.946	-16.99
1.11	-0.24	-1.04	-8.21	0.90	-16.59
3.45	-0.3	0.54	-7.67	3.4	-13.19
1.47	1.47	1.02	-6.65	0.6	-13.13
3.2	-0.22	-0.56	-7.21	3.15	-9.98
2.32	0.04	1.97	-5.24	1.23	-8.75
3.29	-2.3	0.29	-4.95	3.28	-5.47
6.99	-4.37	-1.33	-6.28	6.86	1.39
3.44	-1.88	-2.43	-8.71	2.43	3.82
3.44	-0.7	-3.98	-12.67	-0.789	3.03
5.65	-7.78	-4.57	-17.24	3.32	6.69
2.98	-8.19	-1.49	-18.73	2.58	9.27
7.5	-26.17	-3.05	-21.78	6.85	16.12

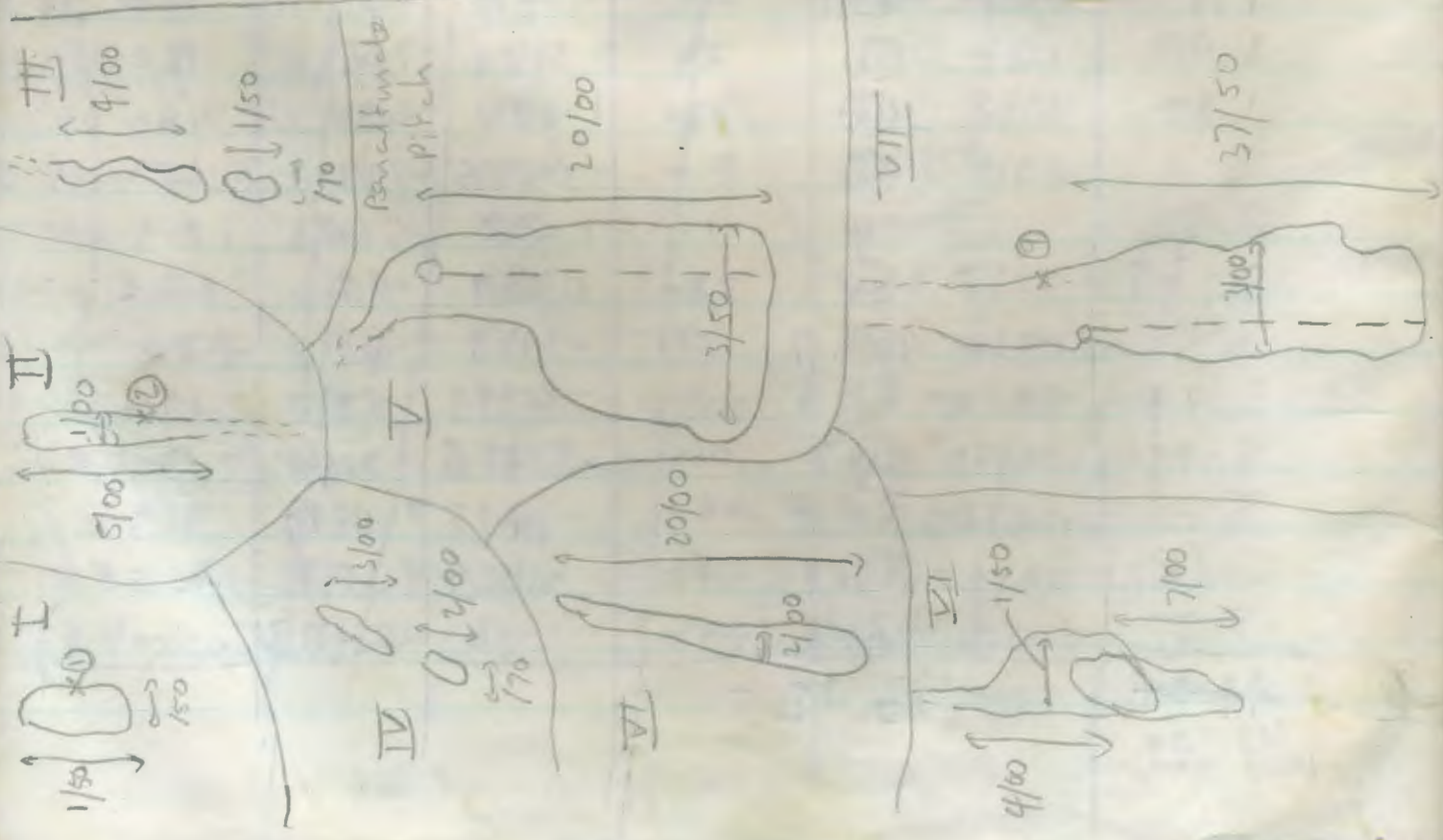
~~44.25~~
111.49

-133.125

(22)

Plan

win 2000 ft.





See Next Page for continuation.



B34

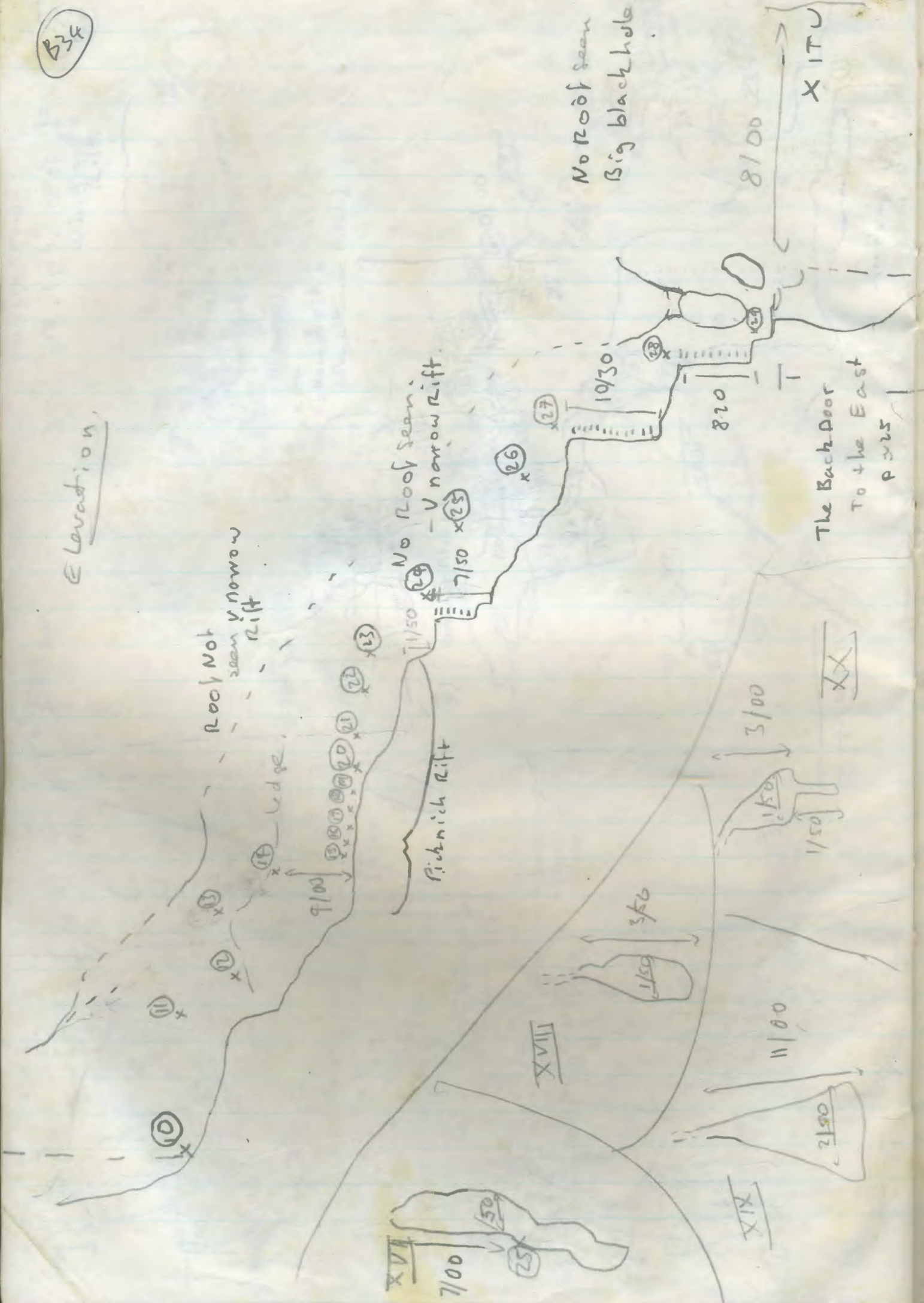
Elevation

Roof Not seen
- narrow Rift

No Roof seen
- V narrow Rift

No Roof seen
Big black hole!

The Back Door
To the East
P 215



Graham's Balls Up

Ladder

Rope

Useless

Wall or Root

XXI

10/10

2/20

315

15

XXII

XIV

Choss +
boulders

Graham's Balls Up

30

