

1986

ASE
AMP

1986
BASE

Day 1 : 6th July: 1986

Van breaks down before we reach motorway.
Big ends gone. Rattle Rattle Bang Bang Couch.

When tweetle Beetles Battle

When tweetle beetles battle
it's called a tweetle beetle battle

When tweetle beetles battle in a puddle
it's called a tweetle beetle puddle battle

When tweetle beetles battle in a puddle with a paddle
it's called a tweetle beetle paddle puddle battle

When tweetle beetles battle in a puddle in a bottle with a paddle
it's called a tweetle beetle bottle puddle paddle battle.

When tweetle beetles battle in a puddle in a bottle with a paddle
or a puddle eating noodles
it's called a tweetle beetle noodle puddle bottle puddle
paddle battle.

Heaven knows I'm miserable now!

8th July. ~~Misty~~ Misty.

So much for the 8th July. Why does the
~~big~~ anonymous author of "Misty" (2 Pulitzer Prizes)
hold document the ~~heroic~~ over-swing of the tent, the fine
links from the lower bar. The pit of heat above
the Santamberry ferry terminal, the enormous negotiations
for transport at least to Covadonga, our eventual

acquisition of an 80 seater luxury coach to
Los Lagos. The hair raising journey up? Perhaps
we shall never know. The driver certainly earned
too 30,000 Pesetas. Most amusing event - the
young people of Santula talking to all our gear
just to see what had to Plymouth. (They meant
the pallets actually).

Alas for the teller Van! No stereo - Slating
year - crumpling mega trips to the Canyons
Pinta desella.

Steve Robert

9th July

An early start for Martin & Fred who undertake
a bus journey to Orinda to get a camping
permit.

For the rest of us it was the first onslaught
on Top Camp. After brief organization, left
at ten past nine. Walk to the top of 'Sod 2'
was ok, plenty of cloud to keep us cool. Climbed
Sod 2 in mist & then broke out into the heat.

Not quite so fun now in the intense sultry heat,
especially when we left the path & picked
our way up thro' the x-valley & across to the camp.

Bloody good feeling getting to top camp, very
impressive backdrop. Set the tents up - order
outside than in & then ate a bit of now & most
& we descended back to base camp. Unavoidable
descent of apart from chatting to Spanish tourists
in French.

& so at last the wandering explorers returned
to the Maria Rosa, peeled off their bright blue goggles
(OK, that was only me but I didn't want to get my comms

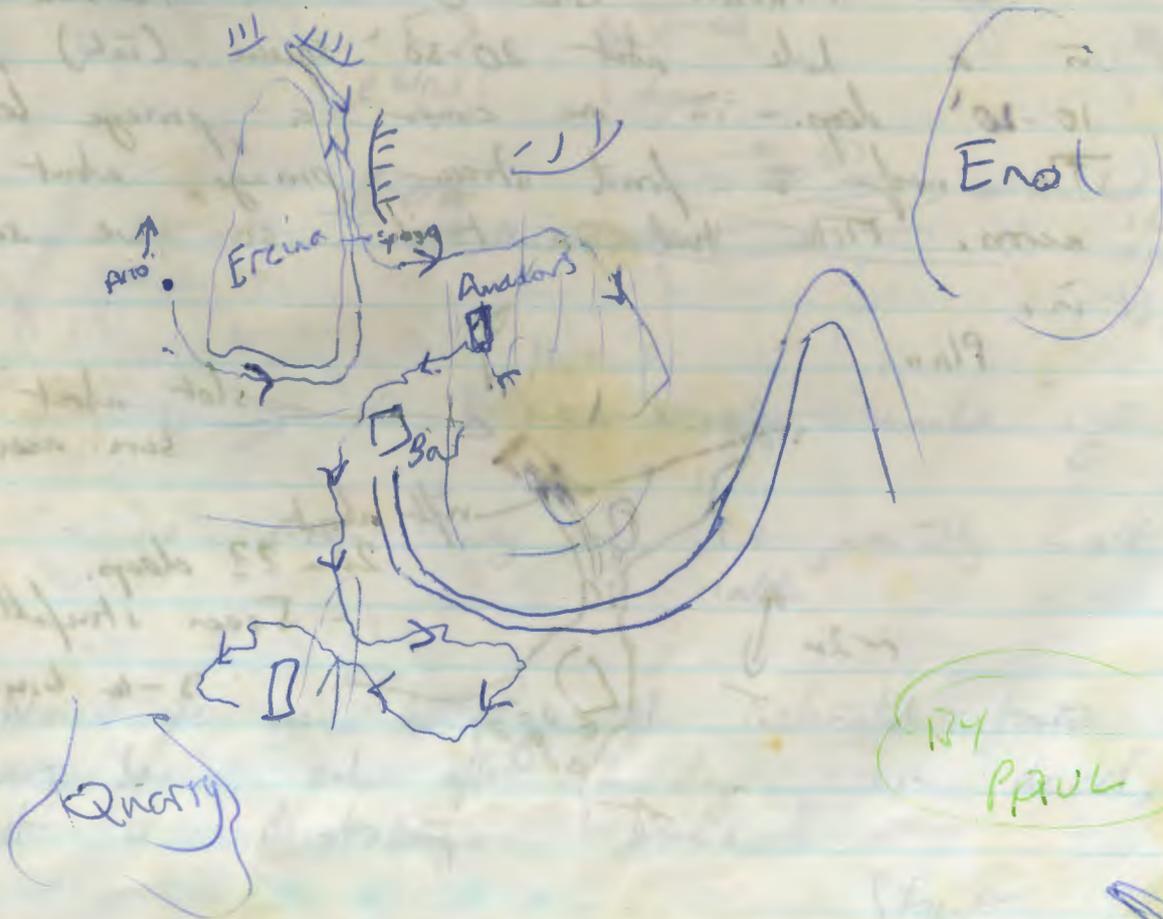
Burnt) & slowly their aching limbs, sunbroke, numbness,
& general feeling of fatigue faded into the sunset. (Sorry,
grey, cold, mist)

Apologies for the long account, but not an awful lot
happened today, apart from the mind boggling scenery.

Jan

9th July: Aster guarding camp Dan came
down early to relieve me so I could get to
Top Camp.

Up to top camp in ~3 hours. On the way
down it got ^{dark} just after Bobias. I managed
to get to the rock where the path starts
to climb (with Arco →) It was over an
hour before I found Base camp. Below
gives some idea of where I went.



12/1/88. Saturday.

Mike, Steve, Phil, Mel, Roy
walk down in mist + passing rain. On the
way down the X-valley we meet Martin,
Dan + John-C. Further on, we strike across
the wastes to the Arvo path.

We find caves!!

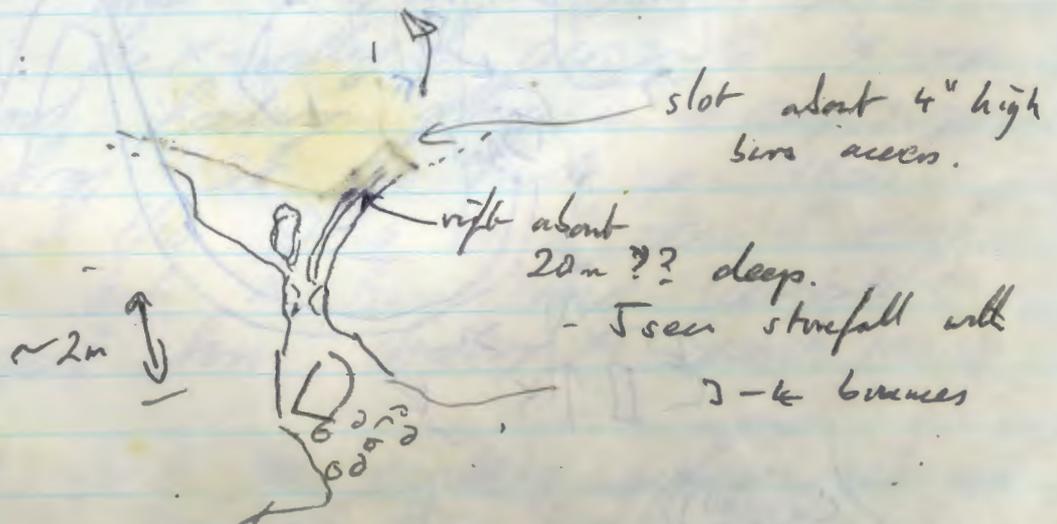
No. 1. a shaft, about 30' deep, with
jagged sides. A loony could possibly free-
climb it, but we desist. A spiky cairn
was put up nearby.

This cave looked so promising that
we put a (spiky) cairn up nearby. We then
decided to go on a bearing of 30° until we
struck the Arvo path, to fix the cave's location
a bit. Immediately we found ---

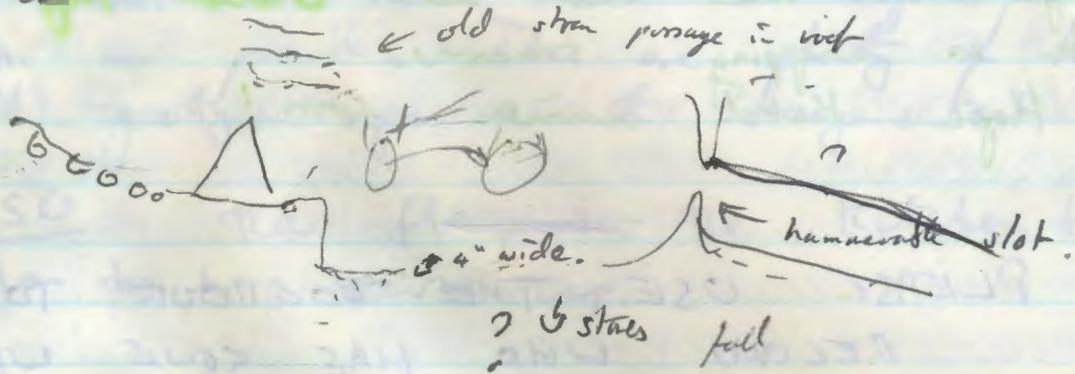
No. 2

Marked "SIE 0" in red, this
is a hole about 20-30' square, (ish), about
10-12' deep. - in one corner a passage leads off.
The roof is frost stream passage, about 8-10"
across. Mike had a torch so we scrambled
in.

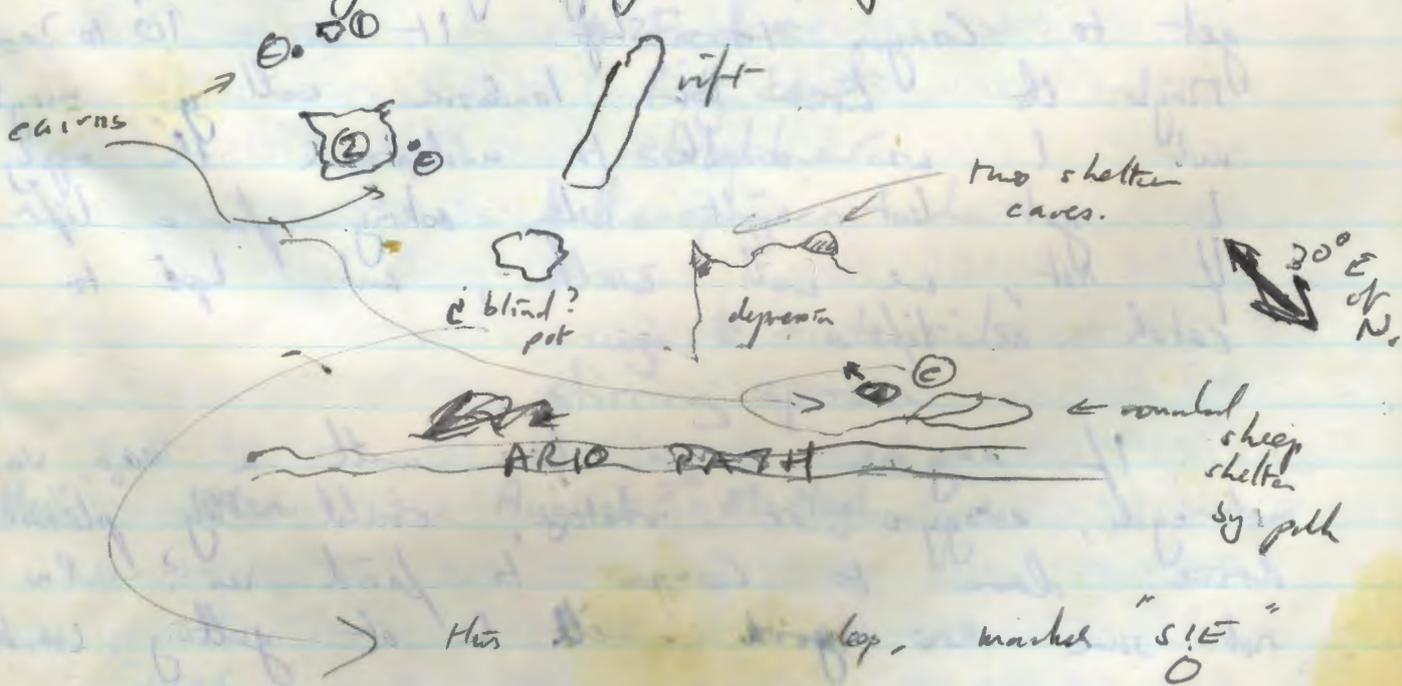
Plan:



Elatol



Elatol by our find, and vowing to return with big hammers, we continued on 30°. Next was a huge rift, then two (large) sheep shelters, then the Ario path. We put a cairn by the path with a stone pointing at the caves, which are about 200 yards ± 300 yards away.



no down way in, but possibly worth a look

Now we are hitting the inebriated horses in the lower bar, and after 2 days, sin decol, the effect is devastating - Whence!

Stave.

(6)

We now face the ordeal of making the people at the lower bar (letter) take us shopping tomorrow.
Hope Hubert arrives soon!

PLEASE USE THE LOGBOOK TO RECORD WHO HAS GONE WHERE, WHY, + CARRYING WHAT!

else it's very difficult to plan things properly!!

13/7 Sunday

Steve + Phil are going to attempt to get to Canyon to ship. It is 10 to 7am. Maybe the lower bar landover will get me. I was unable to understand the reply I got last night when asking for a lift. If not, we will walk, and hope to catch a lift.

If anyone arrives here with a car, van, motor cycle, autogyro or whatever, could they please drive down to Canyon to find us? I'm not sure how good we'll be at getting back!

-Fast it Big + Fast it Loud
Yes I'm Flatulent + I'm proud!



I think the tent should be roped down as soon as possible. There are plenty of lower-
(said) grotty ropes in the orange tent.

ALSO the flap in the kitchen tent needs to be sewn up.

Also Also - if the sun comes out (he!) could the things of mine in the orange tent be hung up to dry?
T.

Essentials for top camp:

- Gas + petrol
- * Food *
- Big tent
- stretcher
- full ~~empty~~ carbide
- pens
- knives & utensils
- stirring spoon

"Neil?" When is August?" McHugh

They were
took
they were
top
well
there was
more
a brilliant

(8)
Orledo. 9th July Fred + Martin.

We had fixed up a lift from the lower bar between 7:00 and 7:30 so we dragged ourselves up at 6:00 in the dark and impenetrable mist and tramped up to the ~~lower bar~~ upper bar. At 7:05 there was the ominous sound of a Land Rover pulling away from the lower bar. At 7:45 we wearily scudded down to Corredouga.

We eventually marched down in under 2 hours, meeting a pastor on the way. As we waited for the bus whose time of departure seemed uncertain we tried vainly to get lifts of the passing cars. A rather flashy red Mercedes came round the corner with 4 people. "Oh well, give it a try!" To our amazement it stopped and Martin and I piled in with our rucksacks.

They were an Argentinian family and the father apologized for Maradona's first goal that knocked us out of the World ~~cup~~ cup. We accelerated suddenly past all the cars that had not given us lifts down to the main road. They were not going to Lengas, but they took us there anyway. In my boots they made up for Maradona's goal.

We did a little shopping and then got on the bus to Añonas. We changed at Añonas for Orledo. There was an appalling video which watched as we sat in an appalling traffic jam.

10th July - Arrival of the Garcia Brothers

When we got to Orsiedo we went into a bar and Martin to the loo while I asked the way to the place we had the address of. "It's much too complicated for me to explain" said the girl, ~~and~~ "I'll take you there." We climbed into another much bigger Mercedes and shot across town to the offices of ICONA. Unfortunately they turned out to be at the other end of a one way street. Martin and I prepared to get out, but oh no. Instead we reversed down the street dodging the oncoming traffic.

We went upstairs to the office and asked for the guy that we had been told to see. "Oh no he's in the National Park." "Which National Park?" "Covadonga."

"Oh my God! We've just spent seven hours traveling from the Covadonga National Park!"

Anyway we managed to sort everything out. Apparently they had changed address, and had not been getting our letters. We wrote a letter applying for permission to camp, and they gave us a permit on the spot.

We walked here to the bus station, had another apricot juice and the girl who had given us a lift talked to me about South American literature. We got the bus back to Cangas, did some shopping and I hitchhiked back to camp in another Mercedes.

15th July.

Things to take up

- Medium knives
- hadders
- Meat
- Bread
- Tomatoes
- Milk
- Mom Flakes
- Stodge
- Bag roll
- Greenies
- Petrol

Die tracing (heroically)

Paul + Dan

Hoya la Madre

Marti + Ray

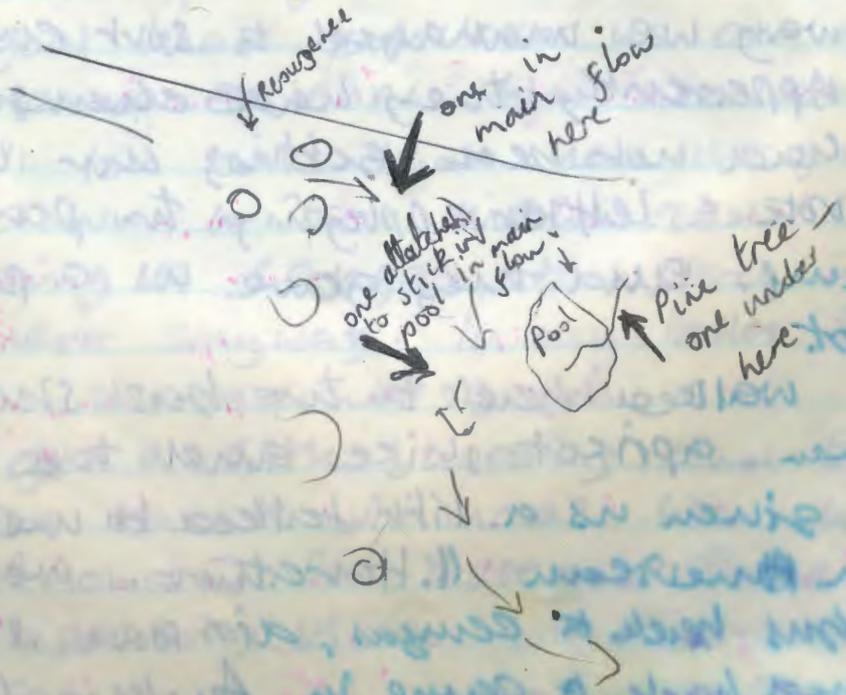
Rio Pomper + Rio la Beigera.

Camp tending

Fred

Hoya la Madre

- where the detectors are



15th July - Arrival of the German Branch
(Gerhard, Chief Wombat) courtesy of Franzjörg
Krieg & Barbel & Hannah & Babystier Barbel, after a
4 days drive from the ^(heart of the) good old Continent & several
beach stops & a visit to LOURDES. In spite of my
forceful attempts to break the VW minibus under the weight
of my gear it did make it up to Lagos without pushing.
¡Hola Picos! and a wonderful welcome with the
peaks all tinged with orange..

✠

NOW ON SALE FROM THE KITTY :

Expedition Viewcards

showing "Sima Conjunta" (entrance & Dancing)
price 60ptas each — limited stock — only 3
to be sold to any one Expedition member!

¡Write home to a friend!

G.W.

Expedition Hatching Tales no. 2.

Our sleeping & trip to Lagos (Phil D. +
Sally) walked what I tried (see earlier) to
ask about a lift to Lagos at the time
of its refusal to understand the reply. Nevertheless,
my flight was delayed. At 7.30,
no landman had left. I started to walk.
As we passed the spring to Lago Enl. we
were delayed. I was

up the hill. I was wearing "warm for eating" gear so I got rather hot - I ran. I ran. I got to the turning, waving frantically at the only car to go to Cangas that early. They stopped at me in a hostile manner as they turned up to Lago Encinas. So I did it.

We continued walking. A bus-over passed. We thought at it. The made obscure gestures, waltz down the road 100 yards, followed by a galloping dog, did a 3-point turn, and waltz back up. A lot of trouble to go to, to avoid giving us a lift.

We continued walking. The upper La Landia came by & gave us a lift to about 2 mi from Cangas. We walked the rest of the way, admiring the houses & scenery, that when driving oneself, we have no time for.

To the Rio Grande - Café & Tortilla. Aha! a sign over the door "Tourist Information," new since last year. Phil goes over - "Open 10 till 2", says he. We stay in the bar. Come till 10 pm. As I go up the stairs in the Palacio de Justicia, I see "Cerrado los Domingos".

OK. To the Spar, and Two Radice (Spar). They are impressed by our hand-drawn maps, and tell us a bus goes to Covadonga. So we go. We get on, and thanks to a lift from an immense Dutch guy & party in the van, we are not bad by 12 noon. The bus is full but we have seats.

To the bank group at Cangas, as it is a bit of a walk. The bank group is at Cangas, as it is a bit of a walk.

up the hill. I was wearing
breakfast at 6:30 in the mist
I got rather hot - I ran. I ran.
the turning, waving frantically at the only
car to go to Cargas that early. They stand at
me in a hostile manner as they turned up to
Lago Encino. So it.

We continued walking. A bat-over passed.
We thought at it. He made obscure gestures
went down the road 100 yards, followed by a
galloping dog, did a 3-point turn, and went back
up. A lot of trouble to go to, to avoid giving
us a lift.

We continued walking. The upper La Landa came
by a gas in a lift to about 2 km from Cargas.
We walked the rest of the way, admiring the
houses & scenery, that when driving oneself, we
has no time for.

To the Rio Grande - Café & Tortilla.
Aha! a sign over the door "Tourist
Information," new since last year. Phil goes
over - "Open 10 till 2", says he. We
stay in the house until 10 pm. As I go
up the stairs in the Palacio de Justicia, I
see "Cerrado los Domingos".

OK. To the Spar, and Two Radice (Siga) 2.
They are impressed by our hand-drawn maps
tell us a bus goes to Covadonga. To the north.
We got on, and thanks to a lift from
an immense Dutch guy especially in the night, we
are led by 12 rooms. The last one had all
to the bank. The group at night, as it

- 15/7/88. still d (Hill and ...)
- 1) ... (Vaya Atseda)
 - 2) Doug, Phil D., John C., ?? (100y to further)
 - 3) ... (Secret Valley)
 - 4) Steve B, Fred, Doug. (Arca Path)
 - 5) Pauls B & Coops (")

All of them were told off of the pissal-
 A-ven at Top Camp owing to no carries
 of gear or food & lack of enthusiasm for
 carrying. I went progressively of the lack of
 work.

Down to the San Juan Lea, Boca's de
 Queso & Vino!
 2 hours, including jogging on the And
 Path

[Signature]

Working with Paul [By Dan]

After resting down the mountain with shoulders rather
 sore, we proceeded of a short walk to
 'Edinayo' (a madre) & back seemed very appealing
 ... better. Walking down to the
 ... more efficient, no rendering about
 ... the dye detector in the stream
 ... at the cave. Scrambled up
 ... for photos
 ... of the most
 ... we then carried

on up the 'hill' (well sheer cliff) to the start of the hill. Much easier and than I thought that slope was bloody steep & we relied on ropes & gorse for too much. At the top we were both getting wrecked & it took several kilos of courage to stand on the edge. I take photos of what we'd just climbed. Hopefully I can take Paul's final words as we reached the top: "That will be the most dangerous thing you do on expedition" as true.

Strolled back to base camp & recounted our tales of adventure. Oh, by the way, there were a couple of small entrances half way up the hills one of which might have gone, perhaps ???

Dan

Just a brief note on how to get to York base camp if you are lucky enough to have a vehicle handy.

Go to Congo and turn left opposite the Coop. Continue down this road for a while. Past the turning for Aruana the gorge gets progressively more spectacular. It's a lovely journey. The trip for a dear day. Go on past the border with Leon & eventually there is a turn-off to Soto. This road is single track but tarmac and goes steeply fringes with magnificent views to Soto. Go through Soto (the bar Pena Santa will direct you if you get lost) and branch right at the end over a bridge. Continue for a few yards until the road forks as though it ends. Here there is a sign pointing to a white van and the place 'Refugio Niyabana'. The route is the next 200m of road and bad as you get but it is a long lay-outain. I have a hazy memory of it but it's a good one.

has to be taken 1st gear and with a great deal of caution avoid the occasional pothole. Don't be tempted by the occasional back off in the forest and keep to the main track. After ~~the~~ you come out into a grassy alp continue for just a bit more to reach the hut and the York Camp.

Journey time from Cangas is about 1 1/2 hrs. It's very spectacular, certainly just as much as here and well worth doing. If you want to walk back, it's 3 hrs to York top camp and about 2 hrs further to our top camp.

Wednesday, 16/7/86.

I sit with a bottle of cider contemplating last Sunday's Observer - "Cabinet desert Thatcher", and a truly awful look about naval death & destruction by Douglas Reeman. Hat (Seleira) belongs to our Jefe.

Evergas, Sab evergas, also is at Top Camp. What they aim to achieve up there is such vast numbers I know not. Maybe some of them will come back down & brighten my day. I suppose I should do the washing-up but inspiration is lacking. Slow, slow expedition. Slow.

Steve

Bigger of Steve

(16)

Things we need - next shipping trip.

- A "slice" for frying eggs.
- Some wooden spoons + large spoons for serving up
- Top/Box camp stove.
- Some salt

We meet the Yugoslav cavers!

Their addresses:

SPELEOLOG → SPELEOLOŠKI ODSJEK "P.D. 'ŽELJEZNIČAR'"
 TRNJANSKA 5_{1/2}, 41000 ZAGREB, YUGOSLAVIA

→ HUDEC SVJETLAN, ČAČMANSKA 2 41000 ZAGREB, YU

KOMISIJA ZA SPELEOLOGIJU PLANINARSKOG SAVEZA HRVATSKE

→ KOZARČEVA 22, 41000 ZAGREB, YU

Commission for Caving in Croatia

the leader of ---

the club

And get pissed!

Wed 16 July - Franzjög & Martin May from Base to Top to Ridge Cave to top of Fred 17
Flintstone and back in reverse order. Both arrive thoroughly satisfied and just a wee bit knackered.

Gerhard carrying 25+15+10m rope + personal gear to Top Camp (6 hrs...) returning 9³⁰ pm.
Among the things encountered en route, apart from millions of grasshoppers/termites & the like, were one rebecca and 9/9, as well as Blas & his mate.

T.C. wants BOG ROLLS! (So does Base!)



There are people who walk around Camp on bare feet.

There are also people who pick up metal rubbish (bottle lids &c.), bend it to little sharp-edged sculptures, and then throw these somewhere into the grass.

Our medics will be happy about the consequences...

17 July - Franzjög drives Fred, Martin & Paul C to an X-ray doctor at Arriandias & possibly to hospital at Oriedo; off 1^{pm}.
Gerhard down to Cangas with them. Got BOG ROLLS & wooden & serving spoons &c., no "egg slice" unfortunately. Got a lift back up to Covadonga by a nice history teacher from Santander, then WALKED ^{up} 40 minutes, watching hundreds of cars driving down in the mist and five going up (four of which full and the fifth a sod, the driver grinning at me and then driving past) before a very nice elderly Dutch couple stopped and took me up. Visibility being down to nil we invited them to a cup of tea and I walked to Lago Ercina, with them...

Gerhard

5³⁰ pm all fogged up - Joany T & Gerhard setting out for Top Camp with the remaining Aquaguard, Bog Rolls, Salt, Maltol, 1 wooden spoon, margarine, & a few more ropes & ladders.

We arrived after a lovely 4 hrs walk, the clouds remaining around us all the time. Unpacked the main food dump from last year! Dave H not coming down unless desperately

⑦ needed - Left T.C. 10^{pm} with rubbish & one empty
Sigg bottle, to be refilled with petrol and taken up a.s.a.p.

Other things needed at Top are:

Phil D's set of nesting bilites (from the store tent)

pens

fresh vegetables (tomatoes, ^(red) peppers, spuds, &c &c, & fruit)

Iodine

pepper (i.e. the spice) & herbs if pass.

also, some fresh
bread would be
a very good idea.

Had a lovely 3 $\frac{1}{2}$ hrs walk down in ever stronger rain. Encountered
two bright glow-worms & one enormous toad. Got lost
quite a bit between Sed 2 & Sed 1 - never has the Fuente at
Las Bobias tasted so sweet! Down 12⁰ am ...

& Tomorrow Pushing Trip in F20! * * * * *

Welcome Ian Houghton - thank goodness we have another
White & driver...

Fred is in hospital at Oviedo, under observation for one
night, hopefully to be picked up tomorrow.

Gerhard

PS A soaked Melanie arrives 1³⁰ am having failed to find
Base Camp for about 3 hours!

16/1/86 (a) Dye Detectors (controls)

- ① gully Blay near Beyers. time 11.30 a.m. 15/7/86
- ② low stream near Pomper. time 2.30 p.m. 15/7/86

① very RLB
 climb to road and walk to the campsite. At the end of the valley pass through some huts and down the river valley. Follow by stream bed to just beyond large tree where the water resurges. The detectors are placed one on the right and one on the centre of the stream facing downstream.

② R.P.
 From RLB facing downstream climb the left bank up to the road. Follow this and take the left hand fork. About 200 yards along this there is a path to the right leading down to the stream. Walk upstream until you reach the stagnant pool. The detectors are below the first stagnant pool where the water comes out from under the rocks.

The trip to put in the Dye Detectors - Roy & Martin.
 Having put the first set of detectors at RLB on Hutch's suggestion for a "nice day walk" we start down hoping to get to where RLB a RP nest. This was so that we could note any more resurgences. It all started off fine but as we went further downstream we soon found that the gentle valley became a gorge and the streambed turned into a series of waterfalls. At first there was no problem since the falls were either climbable or old trees had fallen down the waterfall and these could be climbed down. When the gorge narrowed, we

17/7/66

Hospital trip.

Fred injured last night - and needing his cut lip sutured. After a few hours rest Fred + P.C. walked down & drove down to Amudelas. Hospital in Amudelas was closed with no sign of life. Saw local G.P. who told us to go to Oviedo. There are various hospitals in Oviedo - we went to 3! The first was an experimental attempt to find what turned out to be a psychiatric hospital - this is the first "Hospital" sign on the way into town. We then went to an "outpatients" hospital in the centre of town where a Dr Blanco Quiros stitched the lip very efficiently - but he had no X-ray; so he sent us to the main hospital. This is where we should have gone first. The accident & emergency facilities are at a large hospital complex on the far side of town near the bull ring. It is clearly marked as such on the street map of Oviedo. Accident dept is called "Urgencias". Fred had jaw bones X-rayed - all okay but by now effects of 20hrs camp, 600mg barbiturate and little sleep had caught up with him & was considered concussed, therefore detained.

Paul

ies we were pretty fortunate that Francisco was able to help us out by driving us all the way to Oviedo and back. His car proved invaluable as Fred was able to lie down to sleep whilst we were traveling. Got back at about 10 p.m. Feeling much happier about things.

Datin

ps. 2 night of saving routine.

(22)

17/7/96

Schubert's Martini + Martini to Top Camp.

We are carrying 200 m Sit Rope (Lyon).

3x 10m ropes.

6x hangers

2 ladders

remaining fresh food.

Few tins cornflakes.

Petrol

Iodine.

P Ancars Billies.

5 Loaves Bread.

+ 1 Martini Laverty → (It does take one Martini May to carry one Martini Laverty, does it?)

Shopping List:

Large tent pegs (for use with the hawser-laid ropes), lots of these! & before the first storm

Small tin openers for underground use (a dozen or so)

gloves (gantes de goma industrialles) (a dozen pairs)

cereal to be mixed with cornflakes (de cinnamon)

"slice" for frying eggs?

~~jam, honey, 'noelba'?~~

(cave food (fish tins etc.))

envelopes, stamps, postcards; pens

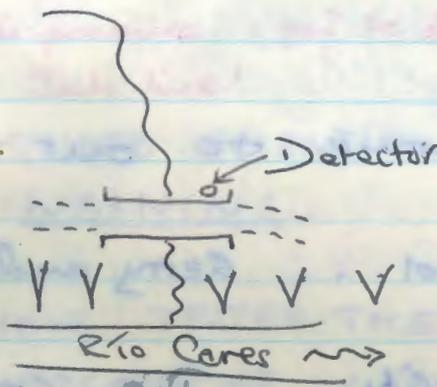
17 July 1986

Stephen Gale, Hilary Winchester

Location of dye detectors along Rio Ceres

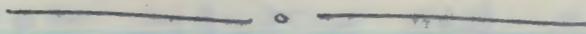
1. Canal: detector in first sighting of canal on walk out from Camarmeria. Detector attached to metal pipe by ACUA NO POTABLE graffito.

2. Stream: about halfway to Culiembro is the only place where a left bank stream crosses the path. Detector attached to boulder near gorge side of bridge



3. Fuente Culiembro

4. Fuente Puente "Bolin"



Gerhardt's Postcards are

now 60 pts

A big welcome to our new visitors!!!

From Liverpool... Gerry and the Pacemakers!!!

From Kansas City... The Count Basie Orchestra!!
(Caving as rope of 23)

From Newport, Tenn... Ian Houghton!!!

From somewhere... Donovan!!! (solo)

From London... The Dave Clarke Rise + minder
(rope of 6)

* * * * *
Atmospheric Pressure Readings: * * * * *
* * * * *

July	10	2.3 rems/ins ²
	11	439 ⁰ x 10 ⁻⁷ Becquerels/gramme
	12	01-278-2332 ext 3306
	13	No air today aargh
	14	" " " "
	15	NO ₂ only. Steve being v. acid.
	16	Phaw. Some Oxygen. 31 millibars, rising.
	17	Uiking, Cronartius, Dogger. storm force 10, imminent
	18	One bee. Two ants. Both dead from radiation.
	19	2 1/2" rain today. Obscured atmosphere.
Red Letter Day	20	Too much pressure... goin' be dread beat + blood in Babylon. Tah live!

WE INTERRUPT THESE SCIENTIFIC READINGS TO BRING YOU A WARNING.

OUR ANALYSTS HAVE TESTED THE TUNA FROM THE SOCIAL SUPERMERCADO AT CANGAS AND SAMPLES HAVE EXCEEDED THE EEC ACTION LEVEL OF 600 BECQUERELS PER GRAMME.

THIS MEANS THE TUNA IS SAFE TO EAT ONLY AT DEPTHS GREATER THAN -650M. ALL EXPEDITION MEMBERS ARE ADVISED TO CHECK ALTIMETERS BEFORE TUCKING IN.

THE CHICKPEAS, TOMATOES, CHORIZO, BOCADILLOS DE JAMON (AMADOR'S BAR - LOWER BAR NOT TESTED) AND MORNING FOODS OATS ARE SAFE.

ESPECIALLY THE OATS.

BY ORDER.

(26)

Getting bashed in the face. By Fred. 18/1/86

(Not getting bashed in the face by Fred)

We had had a pretty good trip. Mike and I had gone down to "Fred's folly". I got about half way, and then fell off. Mike did the rest. Steve Meyers joined us, and we rigged to the "Big Beluga" no problems. I think that we need a line through the bouldery bit, but I expect that Steve has written all the technical stuff down at top camp. We looked around in "Big Beluga". We found a ~~note~~ note that we could put a ladder down and climbed down to stand in the Ridge Streamway again. The stream drops through some loose boulders and down a pitch. ~~At~~ This is not the best way down. There is another gash from the "Big Beluga" that leads into the streamway below the pitch. We didn't have any rope to rig this.

We headed out, with a food stop in the "Big Crunch".

I was in front and going a bit faster than Mike. I waited at "Noreks" camp to show him the way. As we reached to top of the ~~weather~~ Borboriguy ~~stair~~ I actually went up the short ditch. Meanwhile Mike went the wrong way, following the rope up.

I went back to show him the way. He told me to get out of the way as there was a loose rock up there. I thought that I was out of the way, but it rolled down a ledge before falling, and hit me in the face. It knocked out one of my front teeth and cut a large hole in my lip. It didn't hurt much, and my immediate reaction was to get out of the cave as fast as I could before it started hurting, and get to top camp where Paul Cooper could give me some pain killers. I spat out the bits of tooth, wiped off the blood and set off out, crawling at a pretty frantic pace. I got to the entrance, took off all my gear and left it there and headed back to top camp. I got rather hysterical on the way back, tearing up the hill, and screaming at the people outside F20 who weren't moving. I must have been in a bit of a state when I got to Top camp, hysterical, knocked over, crying and covered in blood.

Paul C, Paul B. and Dave H. cleaned me up, gave me lots of pain killers and put me in a sleeping bag. I went to sleep.

I woke up at around 8:30 feeling a bit woozy. ~~though~~ I couldn't open my mouth as it was covered in blood, and they painstakingly wiped it off. I ~~had~~ ~~the~~ only eaten

a few bits of carne food in the last 24 hours, so I thought that I had better eat something. Peanut butter and jam, near were a bit difficult, so I settled for 3 tins of mandarin oranges, after which I felt a bit sick.

Paul got me moving and I walked down feeling dreadful. I felt as if I was about to faint all the time. We struggled down, resting whenever we got to a convenient bit of shade.

Eventually we got to base camp. Franzjörg said that he would take us to Arica so me, Paul, Martin, Franzjörg ~~settled~~ for Arica. I lay down in the back of the VW van and went to sleep. We went to the hospital but it was closed. We saw the G.P., who told us to go to Oriedo. I slept again until we got to the hospital.

We walked in and went up to the reception desk. Immediately we were led to an immaculate room, where immaculate nurses immediately started painstakingly cleaning my face. The doctor seemed to do a pretty neat job stitching me up, and then sent us to another hospital for a jaw X-ray.

I sat around a while in the dentist's waiting room which was exactly like you would expect the waiting room for a Spanish dentist to be like. It was full of people either holding their

wonks with looks of anguish on their faces, moaning every now and then, or looking very pale and staring into the distance in fearful anticipation of the agonizing ordeal awaiting them.

They took some X-rays which were OK, and then I had to sit around while every now and then they asked me if I felt dizzy, until I ~~did~~ feel dizzy. I felt rather faint and woozy again, so they told me to stay the night.

It was quite reassuring to be in a comfortable hospital bed, with clean pajamas, good food, and nurses & doctors taking my blood pressure, taking my pulse, and ~~gazing~~ ^{gazing} meaningfully into my eyes (to see whether my pupils were dilating).

I slept most of the time.

Next morning Dave R came. We picked up some pills and went back to ~~Top Camp~~ Base Camp via the Puerto Romani.

John

(30)

Two beers & two gins down:

"I am a very moral person" says SGR. "I set a very high moral standard".

19/9/86 Shopping at Camps - lots of stamps, postcards, envelopes, tent pegs...

ON SALE FROM THE BASE CAMP KITTY NOW:

'Guañtes de gome'

Tin Openers

for 250 ptas/pair and 75 ptas/t.o. (approximately, check price with Fred!).

WALKED back to COVADONZA as none of the 10^3 cars stopped - must have been doing something wrong. Perhaps I shouldn't have been standing on my head & sticking my tongue out...

Then got a lift by a National Park warden driving his Landrover up like hell. Back 3³⁰ pm

Off to D.C. soon afterwards, carrying pens & one 'egg slice' & one MYSTERY...

*

Please rope the tents down! There are now rope and strong pegs awaiting use.

Gerhard

20/7/86 SUNDAY.

get up at 7.30 to shop = Cargos. We fly down the upper San just as last week. Walk the last 2 km, just as last week, and are joined by several of the identical cars to those last week. To the Rio Grande (Cafés + Tortilla) to the Spar, amazing then yet again walk what we can get into 2 rucksacs. Their daughter has grown up a lot. We purchase some dangerous cheese + a little of Sigto before catching the 11.30 bus to Los Lagos. Steamy hot day.

Notes - Sundays: Buses

10.30	→	STAS
Cargos	→	Covadonga → Los Lagos
11.30	→	12.00 → 1.00
16.30	→	??

Also - next shopping trip take a Gerhard Postcard for the Spar people. Probably worth a little of fuzzy.

on the next shopping trip buy some 'AA' size batteries??

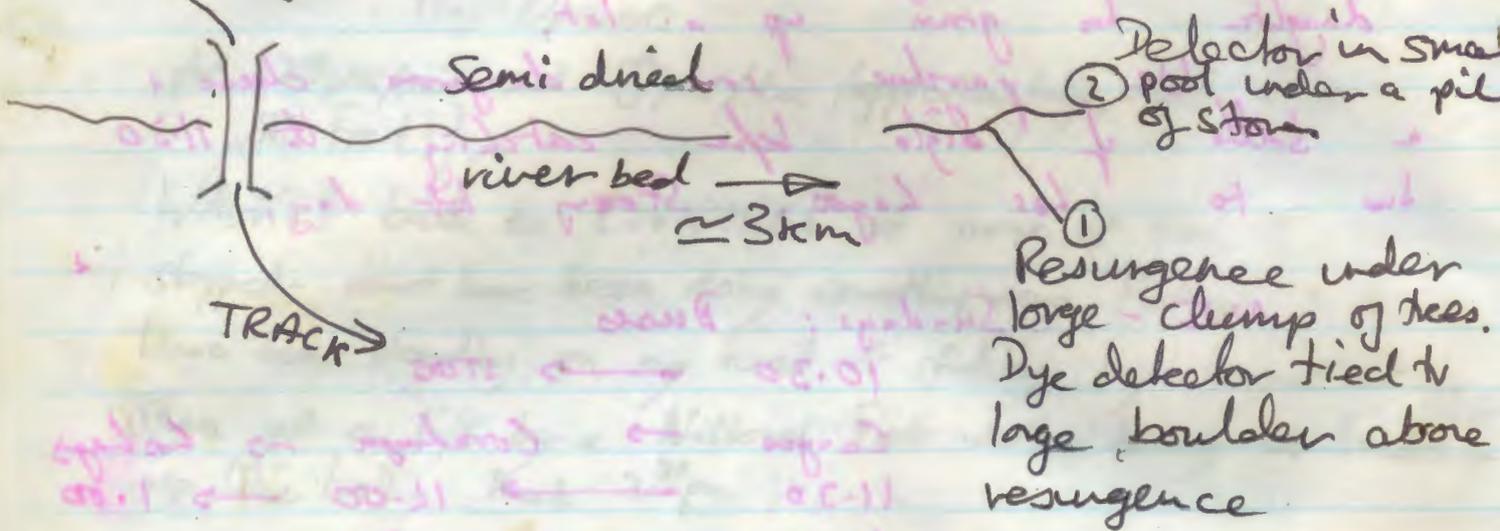
(32)

20/7/86 21/7/86

Dye Detectors. P.D. 21/7/86.

2 detectors placed in resurgences above the bridge on the Rio Pampeiro.

Lakes, Refugio
Bridge



23rd July.

Steve Cole, Hilary, Mark...

* see 25/7 you pillock!

Went pushing thermometers up resurgences and estimating discharge from ~~the~~ ^{above} orifices. Left camp in thick, creeping mist which gradually lifted but leaked more rain in the process. Route via fuente to Las Reblagas polje, & over to Vega la Cueva resurgence, passing a ~~water~~ stream sinking into boulders somewhere N. of Palomera. On to resurgence below bridge on Rio Pampeiro, which was much wetter than S&H's previous visit & frustrated Steve's pedantic measuring techniques with a large ^{sewer} cauldron & stop watch (estimate 30 l sec⁻¹ at least). Returned via similar route, noticing a barbed wire enclosures near Palomera, apparently for botanical research into grazing effects (which seem quite significant from the difference in growth & out of the plots). Fuente ~~that~~ ^{at} Erana discharge increased 4 fold between 11am & 4:30pm.

S&H then departed for Oseja & Pogrenera hoping to dump ^{4 1/2} kg of rhodamine in Orandi & detectors at G Remero & Coudinga this. Any birds or a mischievous appearance of

23rd [unclear] [unclear] of [unclear] [unclear]
Paul Cooper's birthday [unclear] [unclear] [unclear]
[unclear] [unclear] [unclear] of Fergus.

sp. [unclear] [unclear] [unclear] [unclear] [unclear] [unclear]
[unclear] Sgt. Houghton (driver); Troopers Cooper (patman),
[unclear] (Robin) and Brennan.

[unclear] [unclear] [unclear] [unclear] [unclear] [unclear]

The objective was to persuade a series of native
women to assist in the scientific research into
their nocturnal dream patterns: ie ratio of
rem to deep wave sleep, amount of movement etc.

Sgt. H. drove the foraging party first to Cangas.

No women there at all except some mentally
handicapped / brain damaged pre-pubes who pointed
excitedly at us through the windows of the Rio
grande. True, Fred was with us at this point
+ sucking ~~the~~ tortilla through the gap in
his incisors but it did not look that odd,
really. After 3 tortillas each we passed on.

Liba da ella was as wet as everywhere.

The search continued at Cueva 7 to Bustillo
[unclear] older specimen of the day's quarry
[unclear] party that 600 had already gone
[unclear] no more were allowed.

"[unclear] to cash in on the wave of
pro-[unclear] sentiment evoked by the reports
of [unclear] price and no 43" Fergie,
we [unclear] sure of the tourist information,
[unclear] [unclear] all requirements, with
[unclear] [unclear] we moved in for the big
[unclear] (for abduction) but she said
[unclear] [unclear] swimming after
work at 7 [unclear] [unclear] this foray was
far from [unclear] [unclear] [unclear] presented the team

with a number of informative and pleasing little
kajets in full colour.

It was on her recommendations that we
took the road to Lastres, a fishing village.
No specimens here, only fish. All the party
ate several, except Pvt. Bannan. He ate some
bread, and later an ice. (Ice is the 1960s
pedant's way of describing ice cream, y'know; ref. E. W. Smith,
A. Murphy etc.) Houghton swam; others dived from car.

Back then to camp; only rain + catfish. Not
mixed. Then Lagos. Mike has v. worried: non-
appearance of ~~the~~ Uruba from F20. Many
specimens in lower bar, some very young
indeed. Slawered, sang, drank wine, had
specimens (who were most appreciative) in
company singing: "My name is Von Spero." Lusitanus.
Young, very young fish, exposed to from the
bottom of the lake. Loamy mud + calves;
bare shoulders looking at the deeper roundnesses
below. One snag. All members of movement
founded by ~~the~~ that damned cad and
sportsport, Baden-Powell: bus arrived to smother
them in wave. Last play faded into
"Tenemos nubes espaciales en sus misteriosas
tierras. Porque no pasais la noche, ¿verdad?"
Kajets were exposed with admirable and
adolescent politeness. It was time to go
soup + fabada and discussion of our
communications systems under optimal conditions.

The consensus ~~is~~ viewpoint that
an experiment with subjects of varied
pay did not; a sharp drop down
the cave, each taking separate thoughts to show
Rose 349 761 A, bottom way not

Bar Maria Rosa Speleological Research Committee Minutes 23/7/86.

1. It was proposed that research be pursued into:

1.1. Microwave techniques

1.1.1. Dave Rose proposed relays of ovens.

1.1.2. Someone else proposed dishes.

AGREED that a combination of cookers & dishes be set up, the best sites being identified as RELAIS SPELEOS with an appropriate red & blue sign. A survey of such sites could be instituted by Egan Roney, or speleo of suitable gastronomic standing.

1.2. The elimination of sumps.

1.2.1. The possibility of adapting heat exchangers to freeze static sumps seemed sound. It could also help with the re-warming of a hypothermia case resulting.

1.2.2. The assistance of Messrs Chivers & Co should be requested with the intention of securing a source of supply for the jellification (& hence jollification) of sumps. Plastic buckets & spades should suffice for digging when ~~the~~ the appetite or supply of hungry caves fails.

1.2.3. The possibility of boiling sumps away was thought to be the result of someone talking a lot of hot air, but the use of ~~swelled~~ bloated tea bags as dams could not be dismissed so easily.

Meeting went inoperative when refreshments ran out.

24/7/86 John Wilcock & Graham ^{the Mayor} ~~Parker~~ arrived in John's van via Santander ferry. Brought from Oxford:

Graham

3 Boxes John West

1 Box Morafakes

Large box of rope & other Lyon Caving gear

— this was immediately set upon, measured and ferried up to top camp by Graham, Ian, Dave & Fred.

Also bought in Spar at Cangas — bread, pasta, olives, onions, potatoes, peaches, soups, tomatoes, peppers, rice.

Also visited Bar Rio Grande for wine + tortillas, and visited the

Information Centre. On way up to Lagos in the mist met five buses coming down, all at the most awkward constricted parts of the road. They did not, however, succeed in forcing us off the road & into the abyss.

24/7/86, Bar Maria Rosa -

Steve "I'm attempting not to seduce virgins" Roberts
Jonathan "I'd rather like a bunch of flowers" Cooper
(Steve had fed Jonny a sugar cube...)

NEXT SHOPPING TRIP NEEDS :-

BOG ROLL
OIL + VINEGAR
MOLICO
POTATOES
A Broom
Some things for scrubbing pans.

Margarine -
Jams
Cave Choc + Fish
+ other Cave Food

25/7/86.

Another soggy day. Fiesta del Pastor - a good substitute for a web bank holiday at Shegness. We resolve not to visit it even at the cost of not getting tortilla. I sort out the food but got despair

of the kitchen. DANIEL & the divers arrive. They
go to Amadas bar. I follow.

Steve

24th July: After a 29 hr "trip" down F20, what could be better than to stagger back to base camp & sleep for a day? Well, the answer to this question is to watch the game of croquet played by Steve R & Dave R in the middle of base camp. After setting up a course with stobs, tent pegs & wine bottles, the two opponents selected their balls. Steve went for the orange, and after some hesitation, Dave exchanged his potato for the somewhat more aerodynamic orange. The game was a fierce battle, but eventually Steve won.

After a rather unsuccessful attempt at Golf (20 attempts to hit the orange resulted in about the knocking of over of several tent pegs & the displacement of alot of air - but the orange remained stubbornly on the tee.)

& so finally the more mature members of the group entered the welly whanging competition, whilst the more naive members drank lots of wine & took lots of blurred photographs of flying wellies. Ian Houghton took the distance record, Dave Rose the 'how to make yourself look totally ridiculous when hurling a wellie' record, & Neil the "throw the wellie at your own leg" record.

I think we amused some of the onlooking Spaniards - at least those that weren't in the welly throwing target area.

I still can't write very easily.

S.L.

25.7.86

Gerhard has gone to Top and has taken :

1 B&W Hammer

Some hangers

5 tins pineapple

7 plates paella

11 ladies dancing

and a partridge in a pear tree

(delete as inapplicable).

25/7/86

Fiesta day up here so I wait 5 hrs at Coradanya before the Police would let me up ~~to~~ ^{into} Lago. Why not have a look at the cave + resurgence then? Oh how pretty! Fancy them turning it red for the tourists at Fiesta time. The pictures will give the impression of having been taken on infra red film as the water ~~into~~ ^{from} the resurgence and all the way down to Cangas is bright blood red (earliest sighting by me c. 200 pm). Good thing it was nothing to do with us. Spanish tourists seemed quite happy drinking concentrated Casuoyen (more cancers than Chernobyl?) and were even bottling the stuff. I merely surreptitiously oreaked out a couple of sample tubes of the stuff and even that thickness of solution is a very noticable pink!

Dye tracing by York ~~for~~ party for Oxford.

- 1) Walked down at river level from Cain to Culimbro (wet suits essential for swimming certain sections - rope needed only to pass ~~hurdles~~ ~~along the~~ rickshaws along the sections. Swimming with rickshaws on the bank leads to a drowning sensation). The only resurgence that is ~~as~~ likely to be anything ~~else~~ ^{other} than surface runoff is Culimbro itself ~~etc~~ and none of the caves at river level go. There is also a ~~possible~~ ^{sizeable} resurgence ~~at~~ a few km above Cain directly below York top camp.
- 2) Walked down from ~~York~~ Vegabanja (York base camp) to Amira along the Dosa. More than one stream disappears completely under rubble. One resurgence after such a stretch is a particularly beautiful pool crystal clear 15 ft deep and extending sideways underwater. The ~~bottom~~ ^{section} A lot of the ~~river~~ ^{river} is flooded as a result of the dam. One or two ~~etc~~ ^{sizeable} ~~etc~~ ^{sizeable} entrances that go nowhere ~~and~~ but no sizeable resurgences on the ~~the~~ eastern side.

but there is quite a probability that water resurges ^{in the river} underground or under the lake caused by the dam. In fact we did find one impressive resurgence $\frac{1}{4} - \frac{1}{2}$ m³ sec⁻¹. This is up a valley where Cuera Oynia and Fuente Caldeã are marked on the map. The water cascaded down a 30ft waterfall, north from the dirt track. Estimated height is 780m. There are two dry detectors put on here. Perhaps York will replace them ~~with~~ ^{as} ~~the~~ ^{as} ~~controls~~. ~~Otherwise~~ you can do it as well! Anyway York will remove them if they are still there at the end of the expedition.

Do not write above line

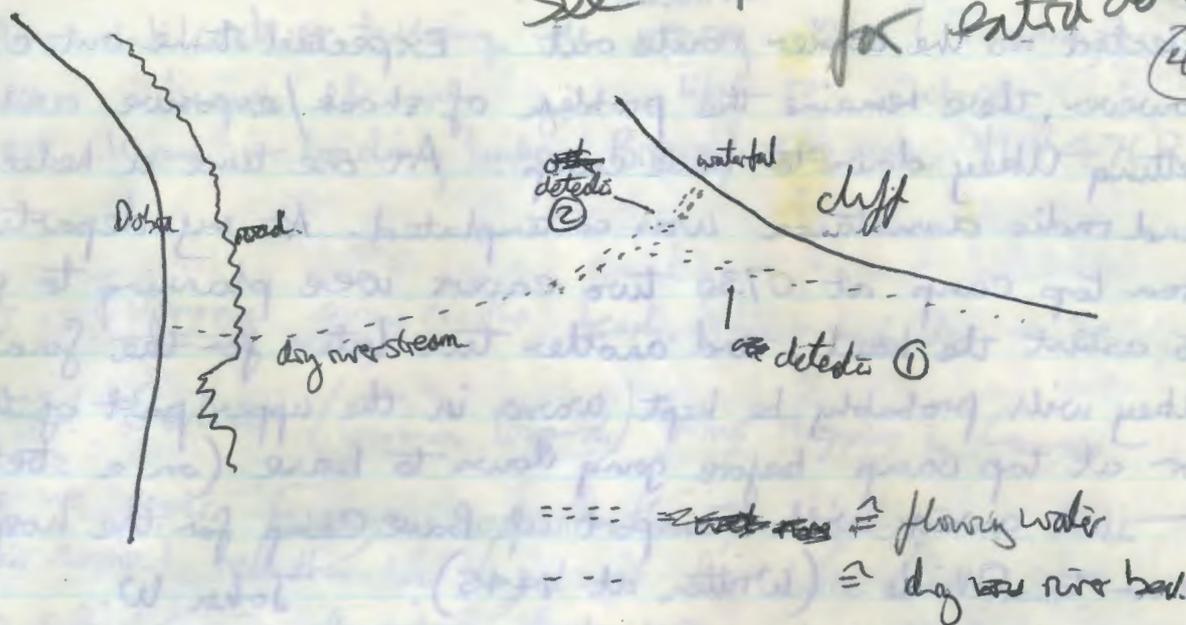
25/7/80

Thick F---wit Cale has found
 the Holy Resurgence of Cavadouga
 BRIGHT RED
 WHAT A TIT!

1 over 1 clean dry T-shirt - Mike

See a few persons
for extra detectors

(41)



Detector ① is c. 50 yds from the waterfall up the other stream
position marked by a cairn.
Detector ② is level with the last low ~~rock~~ rockfall
beside the stream.

Top Camp Needs

Bread & Jam
Tomatoes → Box for tomatoes
Green & red peppers
Malico
Sourbites

28/7 Came down early because of the happenings in the night.
Ukey fell at the bottom of Ridge Cave (now connected to 2/6
at Dinosaur Beach) and got concussion & damaged her arm
and hearing on one side; ~~message~~ message was brought out about
midnight 27/28.7. Richard had just walked up in the dark, so
immediately went down as doctor. The next positive news was at
7.0 am. Apart from selected rescue teams the rest of us had gone
to bed to be fresh for action on the morrow. At 7.0 am Fred
emerged to give the news that Ukey was managing to climb
with assistance and was half-way up 2/6, this having been

(42)

selected as the easier route out. Expected time out c. 11 am. However, there remains the problem of shock/exposure and of getting Ukey down to base camp. At one time a helicopter and radio assistance was contemplated. At my departure from top camp at 0730 two cavers were planning to go in to assist the haul, and another two later for the final stages. Ukey will probably be kept warm in the upper part of the cave or at top camp before going down to base (on a stretcher?) — we await with transport at Base Camp for the hospital run to Oviedo. (Written at 1445). John W.

28/7 1330 Markus arrives with survey gear (conventional theodolite [not laser/electronic system], measuring staff, tripod, arrows, surveyors staffs with tripod mounts). All this will be heavy to carry to top camp. Markus was advised to pitch his tent at Base Camp to await the rescue developments at top camp, and expressed his intention to visit the Minas de Buffavera this afternoon — he is interested in Mines.

28/7 Phil & Marti - L. went shopping in Cangas - mainly for gas & petrol as cooking fuel was v. low - & found 1. YUCRF shopping after a day at seaside 2. Shops close on Mondays in Cangas.

Proceeded to obtain gas in Arriadas.

Phil tidied camp in preparation for possible influx of people after rescue

John W. wanted to become an ambulance man. Paul took fuel, chocolate, stores and chocolate (6) up mountain in 4 pm.

Coffee, more chocolate & fruit probably required for next coming up. ... (faded text) ...

John Wilcock is taking the ^{Santander} ferry on (Tuesday) 12th August & can give lifts to Oxford. Meet 10am in loading lines. Brown/white van YUY476R.

Tue 29 July: Everyone going to the beach. The remainder - ie. Marcus & Gerhard (German Brands) going shopping in Cangas where we meet Everyone opposite the post office, and (much to their surprise) tell them how to get at the Lista de correos. Phil D. & Paul C. are after 'preventive' stuff - whom for, I wonder? - but I leave this responsibility with the doctors... Pay a visit to the Santa Cueva de cathedral of Covadonga on the way back. The pool is still an unhealthy red all over! - Divers are guarding camp, for which many thanks

Taking up to T.C.: Jam, sugar, some loo paper, Carbide (^{small} BDA), oil (1 bottle) Nescafe, 2x marg, noolla, 5 loaves bread, apples & oranges. Also another MYSTERY. Bloody heavy pack. Off 5pm-ish.

FRED: Kerry now owes me ^{568g} ~~300g~~ ^{300g} more for food, loo paper etc; ~~there's mail for John Hutch & Phil Duncan~~ ^{there's mail for John Hutch & Phil Duncan}

BRING TO T.C. TOMORROW PLEASE:
(or whenever you go)

Marcus owes him ^{300g} 300g for week 4 & 3 pencils.

more margarine, vegetables, oil, loo paper, molizo, 30 eggs ^(readily packed), soups, John West stuff & Morniflakes & cave food, fuel, carbide; Marcus' surveying gear (if you can manage some of it) - JA

PAUL COOPER: Peter reflector is in log book plastic bag!

Marcus & Gerhard

29/7

Yesterday brought Ukey out of Ridge Cave via 2/6. Rescue was started at approx 11⁴⁵ pm 27/7 by Dan. He estimated time of accident as approx 7⁰⁰ pm. Ukey was climbing in a rift and fell backwards striking her head. Dan said she had difficulty hearing in her left ear and difficulty using her left arm. Rescue team consisted of Paul & Richard (going down 2/6 = medical gear and Martin & Johnathan who went in via Ridge. Entered cave at approx 11 01³⁰ am. We met Ukey and Fred, closely followed by Neil, at Pinesum Beach at 3 am.

At that time Ukey was fully conscious and helping herself slowly out of the cave. She was very tired and was suffering intermittent attacks of dizziness.

Brief formal testing showed no objective hearing loss and no diplopia nor nystagmus.

We continued slowly and uneventfully out of the cave. Ukey went up the pitches in tandem = Richard who helped her with change-overs. We came out at about midday. That afternoon I carefully examined her again. All cranial nerves were intact with no discharge from her ear and no hearing loss. She had some bruising over her left eye with local tenderness but no apparent bony injury. Richard and I agreed that she should rest and that immediate further evacuation was unnecessary. We left Top Camp at 5 pm with instructions to check on her regularly.

GP

29/7 Beach trip to Ribadesella in John's van. Everybody seemed glad of a rest after exertions, and it was a very pleasant day apart from the end (see below). Went to Covadonga to see the still red pool. At Cangas visited Bar Rio Grande (closed) — and we couldn't get tortillas anywhere else, but we did have coffee & pastries. Post office, bank, watch shop (John bought new watch). Ribadesella — couldn't get into Cueva Tito Bustillo since 400 limit had been exceeded. Beach until 3.0 pm (much wall-climbing and surfing), then a very excellent meal of fish soup, fabada with potatoes and fried fish + apple and coffee at the Bar del Puerto. Returned to beach for second session. Unfortunately the van was broken into in our absence and some money and cameras to the total of about £800 were taken. We therefore spent until about 8 pm explaining this to the Guardia Civil and filling in forms to show to insurance people — but the annoying thing is the loss of irreplaceable Rollei cameras and of course the films inside them. Insurance will, however, cover the monetary loss (but not the sentimental loss. It was interesting to see the inside of the Guardia Civil premises — most depressing, and not changed essentially since Franco's time except for the King's portrait. We saw some wanted photographs of drug smugglers and ETA activists. Returned in a depressed state to Lagos, but this mood was partially dispelled by a visit to the lower bar. Nobody, however, went up to top camp, despite previous good intentions.

A psychological study of why people climb walls might prove interesting.

30/7 John leaves early for the Barcelona congress. Returning from Santander ^{by ferry} on Tuesday 12th August. Anybody is welcome to meet in loading lines at 10.0 am latest for lift to Oxford. Don't forget your passenger ticket. Brown/white van YUY476R.

(46) COUNCIL DEBTOR

- DUNCAN GILCHRIST 19.20
- GEOFF HOGAN 5.00
- GRAHAM MAYLOR 15.00
- DAVE ROSE 14.20
- PHIL ROSE 2.55
- PHIL DUNNAN 7.50
- MARTIN LAVERTY 8.55 paid

Please Give Cheques to
 Paul Brennan Rest of
 Luck for rest of expedition
 See or contacting

[Large stylized signature]

from 26th March on Tuesday 1st August. Anybody is welcome
 to meet in working hours at 10.0 am later for life to Oxford. Don't forget
 new passport test. From White for YUYAICR.

At last its time to say "Adios" to base camp here (See top camp log 2 days ago). Waiting for the arrival of Hatch's car gives me time to reflect on the happy memories I will take away with me and stoned until the next gear club meeting I've tempted to walk up the Arco path for old times sake, but delving into a smiley face bowl of Morn flakes serves the nostalgia equally well. Hope nothing more goes drastically wrong on the expedition and P20 turns into a pleasant one. Take care now

Saralham

P.S. Martin, when you get a form from BSCRA insurance for your tent, could you also get a form for me for my tent.

P.P.S. If anyone sees a yellow van S-shirts in large size - ITS MINE and I want it back.

RECIPE of the DAY. 10099 sic!

- Smiley Face Bowl of Morn flakes

- Ingredients - Morn flakes

Sugar

"Molico" milk powder

NB Five phls, or coffee tsp will

NOT do

Water

Jam - e.g. Marmelada de Fresa

Melancia

de

- Serves 1

(48)

5. Place waffle flakes in bowl, not plate as water (add later) will flow over. Sprinkle 2 tablespoons full of sugar over waffle flakes. Sprinkle 4 tablespoons full of molasses over waffle flakes & sugar. Leave for 5 minutes and put one large cup with water. Pour cupful of water over waffle flakes, sugar & molasses, stir with metal spoon until whole bowlful reaches starchy consistency. Using spoon apply juice to base waffle flakes, sugar, molasses & water according to pattern below.

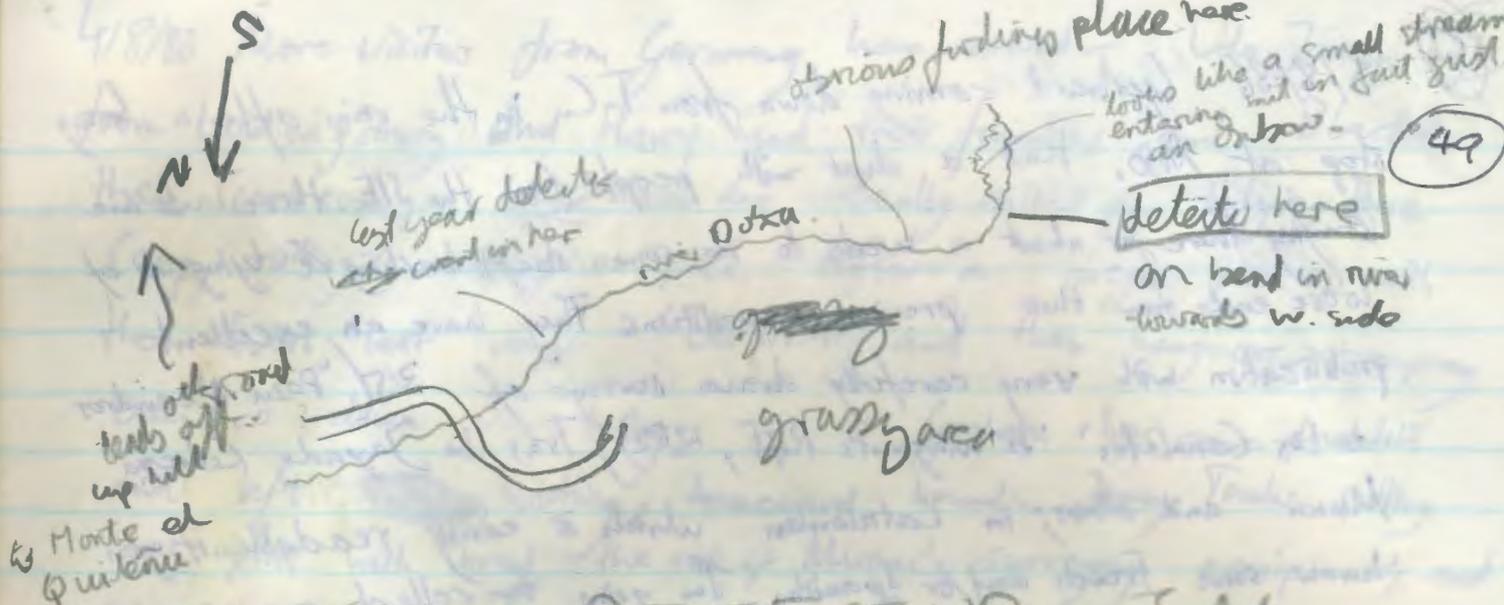


- The dish is now ready for eating.

Next Year's recipe

- The Grumpy face bowl of Waffle flakes

(This has to go into the PROC !!!)



EXTRA DETECTOR IN

DOBRA ~~grassy~~

you may have trouble finding it, (I didn't put it in)

Hubb

~~Hubb~~

(59) 3/8/86 Gerhard coming down from T.C. in the rain after a long stop at Arid. Had a chat with people from the SIE there who are staying there for about a week to do some shaft bashing & tying up of loose ends from their previous expeditions. They have an excellent publication with very carefully drawn surveys of 3/5 ("Poza Meandros de los Canales" to Wagnit's Rift, 1982), Tras la Jayada, Cabeza Muxa and others in Catalan which is easily readable if you know some French and/or Spanish. I'm going to collect one copy of these when they leave Arid ~~and~~ for the OUC library (and have copies made for myself and for VHM !!). In turn we ought to send a free copy of Proc 12 to: (possibly a Proc 4, too if they don't have one yet)

SECCIÓ D' INVESTIGACIONS ESPELEOLÒGIQUES
DEL CENTRE EXCURSIONISTA ÀLIGA

calle Viladomat 152
Barcelona 15
Catalunya
Espanya

If you want to write to Blas & Julia during the winter (and send them pictures, perhaps?) you may use the following address (Julia's parents):

JULIA DIAZ ORTEGA
calle RAFAEL DEL RIEGO 3-2º 120.
LA VEGUINA - TURÓN
Paseo de ASTURIAS
Espanya

Gerhard

4/8/86 More visitors from Germany have arrived - Udo Jansen (51) from Ludwigsburg and Harry and their families and Bladere the Score cow, a huge black dog ideally suited for tidying Base Camp, sitting/sleeping on, etc. After a mega-piss-up with the divers last night Udo, Harry and their hangovers accompany Dan & Co down Osu today. - Graham has come downhill and left ~~with~~ hitching, homeward bound. Jonny Tombs setting out uphill with bread the rest of Marcus' surveying equipment, and some other goodies. The weather is pretty inconclusive...

8pm have compressed the camp & am zipping off to Amador's with the other Germans to celebrate my birthday. Have fun here & have some chortos (dangling above the stove)

Welcome Phil Rose! G.

5/8/86 'On the futility of eating'

Woke up at 6 am-ish in lovely sunshine and had just enough time & wits left to put on underwear & shoes & get out of my tent before I threw up most of what I'd eaten yesterday evening. The rest left via the more normal exit three hours later. Argh. - The food tent was found to be inhabited by a mouse this morning.

G.

Could someone going to Cangas these days please buy a toothbrush for Phil Rose - TA. G.

Duncan Goldmist has arrived - Welcome! & walked up to Top in the early afternoon with personal stuff & some veg. No-one coming down. -

G.

(52) 6/8/86 Mega-food carry uphill

Gerhard taking: carbide, gas (lots), ~~canes~~ ^{meat}, salmon, tomatoes, molize, flamed cane food (fruit) (some).

7/8/86 left in dinner to catch the bus.

Good evening & see you all at BCRA

Ed

Andy's address in Geneva: from ~ early Sept. 1986.

No 2

~~Rue~~ Rue du Centenaire,
1227 Carouges,
Geneve

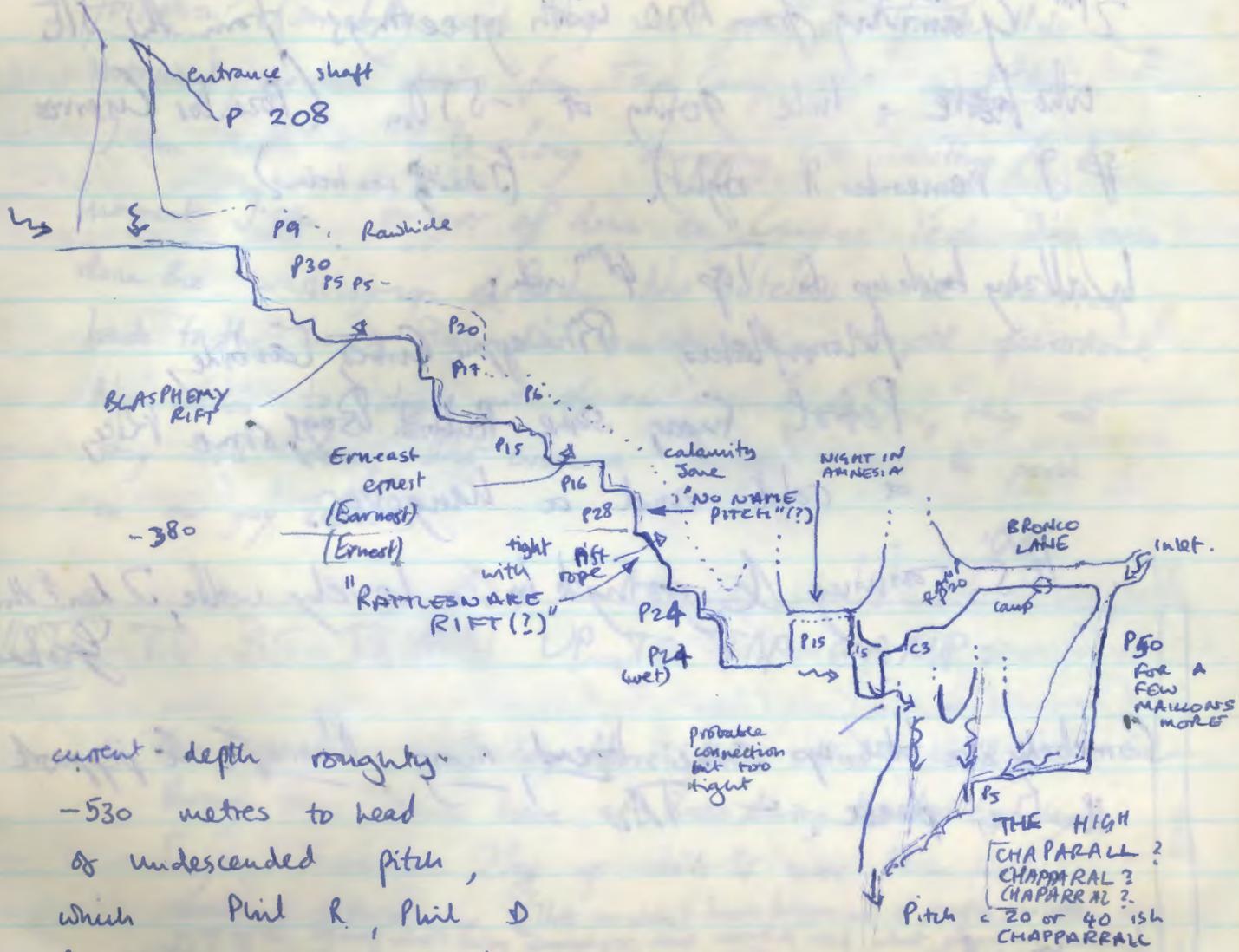
Book your skiing hol's ~~now~~ now!

2/8/86: PB down to Cangas. Picked up "Lista" with letters for:

- Phil D (1)
- Dave H (1)
- Fred (1)
- Marcus (1)
- Gerhard (~ 10)

(I found 5, in fact, 4)

F20 as it stands 8th August:



current depth roughly:

-530 metres to head of undescended pitch, which Phil R, Phil D

& El Jefe are supposed to be pushing down today: the cave must either have stopped or broken the 2,000 feet mark.

(Final depth ~ 585m - sump level within a few metres of that of Psycho killer)

(54)

10 August:

2^{pm} G arriving from Ario with greetings from the STE who have a hole going at -550m (Pozo los Cuerrros if I remember it right). (I didn't see below)

Walking back up to Top from with:

Moonflakes, Pineapple Cubes, Carbide, Petrol, Sugar, some Rubber Bags, some Rice, a cold and a hangover.

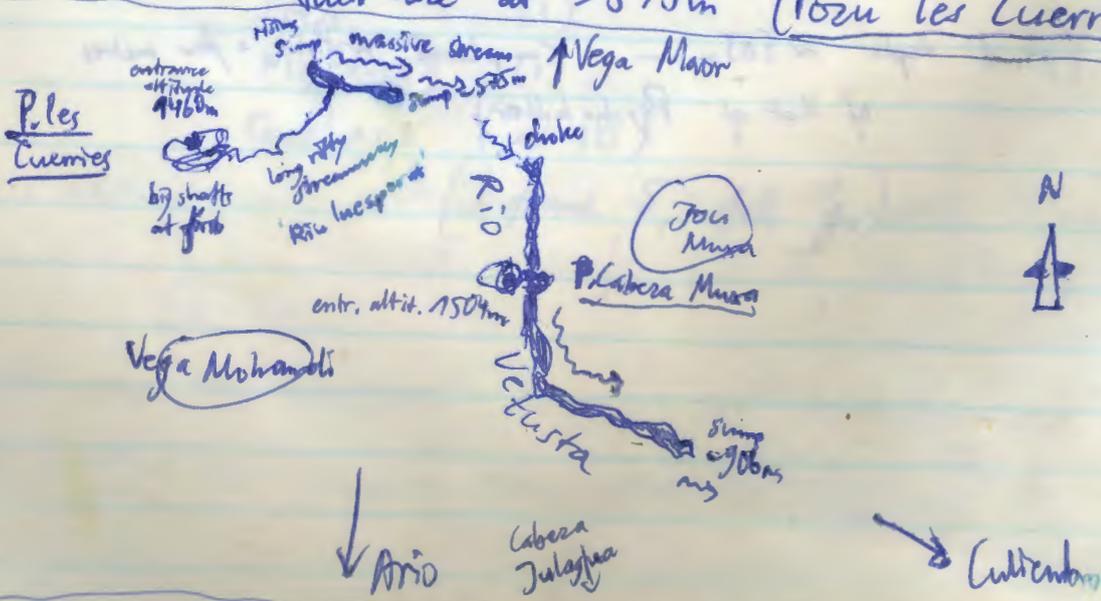
It's raining & going to be a lovely walk, I don't think Gerhard

Somebody else take up some bread, orange, Nescafe & peppercorn like, please. - TAC

12 August:

3^{pm} G arriving from Ario with more greetings from the STE who've bottomed their hole at -575m (Pozo los Cuerrros).

SKETCH MAP & PLAN:



13 August — Oh Jim so lonely. The divers' tents forsaken (somebody said they were going to ^(return and) pack this morning), no one down from Top Camp yet, and here I am with a mile-long shopping list waiting for the moment I can bugger off down to Cangas. Yeah I've even done the washing up already. No botellas to be carried back to the Lower Bar. No tourists asking stupid questions. No vacos to chase out of our sacred fences, they all stay well clear. Not even a drough wants to perch on our guy ropes...

Y/N

NOT TO BE TAKEN UP TO TOP CAMP:

- The remaining 7-odd Moren'flake tins - we'll get through these down here at Base during the last Exp. days.
- Sugar. There are 2kg up which is more than we'll manage between us. (This wouldn't have happened if people wrote up in the logbook what's being carried up, and cared to read what others have carried.)
- Petrol - for the moment. It were walked up on Sunday and these should last us at least a week from now.
- Rice and Pasta - tons of these are in the Top food tent and they can't be buried for next year. (Well you can bury them but they won't do you any good in '87...)
- 206 Bleuett gaz cylinders. Half a dozen waiting at Top - we use the ones here for the lanterns.
- any kind of tackle, obviously.

Also, when you're carrying up half a ton of fresh veg, it's a good idea to leave one each tomato, pepper, onion, spud, orange, lentil, chick pea, green bean or what have you behind so that the poor chap having to guard Base the following night can cook himself a nice dinner. TA.

Gabard

(56) A Poem for Gerhard by two friends from university at Munich,
Die Höhlenforscher

Fast täglich suchen sie nach Spalten,
um sich im Dunkeln aufzuhalten.
Dort hängen sie dann oft am Seil,
denn manche Spalte ist gar steil!

Nach während sie den Boden suchen,
-man hört sie manchmal leise fluchen-
vermessen sie, wie sich's gehört,
die Höhle ziemlich ungestört.

Nur mühsam kann in engen Gängen
der Dünnste sich noch vorwärts zwingen,
Und braucht er auch Geduld und Kraft,
wie glücklich ist er, wenn er's schafft.

Dann heißt es, sich zurück zu winden,
um den andern zu verkünden,
daß es nichts zu sehen gibt,
wenn man nicht nen Fels verschiebt.

Sichermaßen. man belehrt
macht die ganze Gruppe kehrt,
sucht nach einem andern Gang,
hofft, der sei besonders lang.

Eine edle Forscherseele
trotzt auch einer nassen Höhle!
Ist der Gummizug dicht,
scheut sie auch das Schwimmen nicht.

Wenn man heimkehrt, wird beschrieben,
wann man wo wie lang geblieben.
Fotos sind von großem Wert,
sie zu machen, ist erschwert:

Dafür braucht der Forscher Licht,
doch das gibt's in Höhlen nicht.
Ein Behelf ist hier nicht dumm:
Blitzlicht mit Magnesium!

Oh die Sache funktioniert?
Hast Du das schon ausprobiert?
Wir wünschen Dir dazu viel Glück!
Und komm bald wieder heil zurück!

Annettes & Johannes Schwaiger
July 1986

translated (not too well) by G. on 12 August whilst guarding Base Camp.)

The Cave Explorers.

(57)

They look for cracks 'bout ev'ry day,
so that they may in darkness stay.
It oft takes ropes to go down deep,
for many cracks are rather steep!

The floor unseen still, God knows where,
- you sometimes hear them softly swear -
they start (they know how to behave)
surveying properly the cave.

Low is the roof, the rift is tight,
even the thinnest has to fight.
Patience is needed much and strength,
but happy who gets through at length.

Then 'outward' is the way to choose
and back to Camp, to spread the news
that ev'rywhere the view is block'd
unless you try to shift a rock.

Thus enlightened with surprises
the whole group at once arises:
down the next route in a throng,
hoping it will turn out long.

A true caver remains brave
even in the wettest cave!
With a good web suit, yes my dear,
- a swim is all enjoyment sheer.

Write up when you return, don't lie,
who was where, ^{for} how long, and why.
Pictures a good impression make
although they're somewhat hard to take.

For these the caver needs much light,
alas, the cave's as dark as night!
Chemistry helps you in this fix:
Just fire a magnesium mix.

Whether this will work alright?
Goshard, we wonder, have you tried?
We wish you luck there all around!
And come back home soon, safe and sound!

* * *

(58)

PS: I always find myself monopolizing the logbooks around this time of the year - not that I intended to, but apparently everybody else's motivation just peters out in early August, and the logs not even being read.

(Any exceptions to the last assertion please make yourselves known belows

M. MOUSE

(that's what I thought!)

O. Duck

~~G. Duck~~

TA.)

13 August 10 am

Cops - these divers have fooled me. They're all in their tents, snoring - only now one has stuck his nose out. When they got in last night I don't know - either they've been sleeping all afternoon or they came home quietly after 10 pm...

Anyway off to Langas now & double quick. Hope to be back before 1 pm. (Taking along the big kitty money but not the kitty bag.)

13th later in the day.

Cheers for the Moonshades bags
lot of love & explicit sex
"The shoring drawers"



There's mail for Roy (2), Martin et jeff & Fred (1),
(2, 1 of them old!) (1)

5 PM (!) back from epic shopping trip. Spent 1 hour walking &
waiting for a lift down, and 2 1/2 hrs walking/waiting for a lift up.
Even so I had to walk the finish from Enrol.

7:30 pm setting out for TL. Carrying:

5 loaves bread, 27 eggs, marg, jam, honey, nocilla, some rubbish bags,
some soups, some herbs & spices, some olives, peppers, tomatoes, a few apples,
sour drops. Also one anchor grease syringe, and cotton wool for the
first-aid kit. Clouds gathering now over the path, think I'll
want my compass hanging ~~round~~ my neck.

As a change from G some left hard drinkable
Phil W. left for top camp at some early hour
(hardly light I believe, but then I didn't open my
eyes. As it is at last sunny I have
opened up the tents to dry and washed my socks!
I would go for a swim in enal but I guess
I can't leave camp unattended. We have had two
groups of visitors today, the S.I.P. have given us
their 'pos' and an english couple - I can't remember
names, are heavy and may visit top camp.

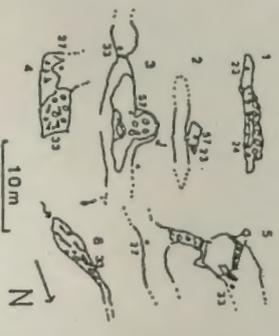
14th Aug. PB. Set off from T.C. at ~ 11 am. In the X-valley I slipped and twisted my ankle. I hopped to Airo where Blas bandaged me up and sent me on my way. Got down at ~ 4pm with no pack, it is still in the valley below. I hope someone comes down before I run out of water as I can't make it over to the spring and back.

QUOTE OF THE DAY (Tu 19/8/86)

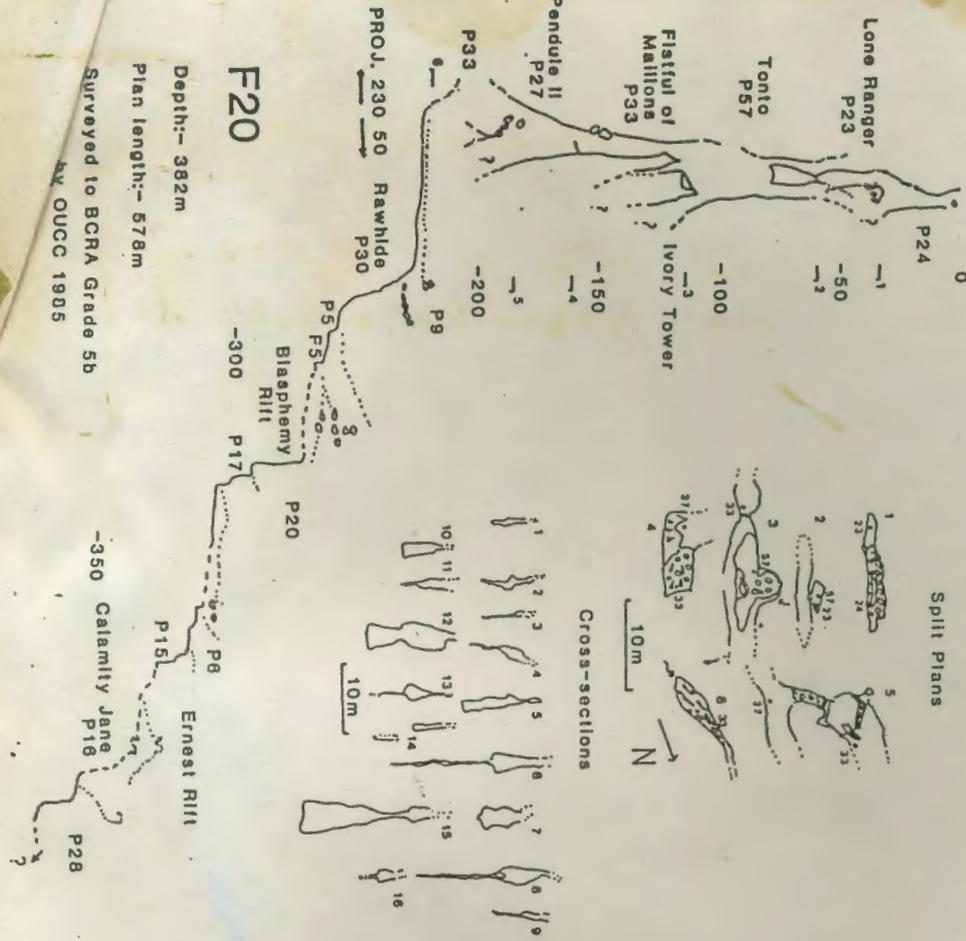
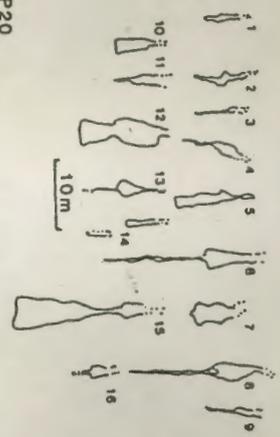
Dave "I'm too honest"
"Too fucking honest"
"I'm not honest that way" Horley



Spill Plans



Cross-sections



Depth:- 382m
 Plan length:- 578m
 Surveyed to BCRA Grade 5b
 by OUGC 1905

EXPEDITION MEMBERS:

The Expedition will consist of a team of approximately 25 members, a majority of whom have experience of previous OUGC expeditions to Spain.

Committee:

Leader:

Martin May (20), Engineering Science undergraduate, Worcester College, Oxford. One previous OUGC expedition.

Secretary:

Duncan Gilchrist (20), PPE undergraduate, Merton College, Oxford. One previous OUGC expedition.

Treasurer:

David Horsley (21), Biochemistry undergraduate, Hertford College, Oxford. Two previous OUGC expeditions.

Tacklemaster:

Paul Brennan (20), Chemistry undergraduate, Oriel College, Oxford. One previous OUGC expedition.

Medical Officers:

Dr. Thomas Houghton (27), qualified doctor. Three previous OUGC expeditions.

Transport Officers:

Dr. Steven Roberts (30), postdoctoral metallurgist, Oxford University. Three previous OUGC expeditions.

Members:

Ursula Collie (23), Outdoor Activities Instructor; three previous OUGC expeditions.

David Rose (26), Journalist (the 'Guardian'); six previous OUGC expeditions.

Steven Meyers (25), Caving Instructor; eleven previous expeditions.

Frederick Wickham (23), Trainee Teacher; two previous OUGC expeditions.

Geoffrey Hogan (26), Graduate Medical Physicist, Biochemistry Dept, Oxford University; one previous OUGC expedition.

Ian Houghton (25), Polymer Technologist; six previous OUGC expeditions.

Dr. Sarah Gregson (27), Paediatrician; three previous OUGC expeditions.

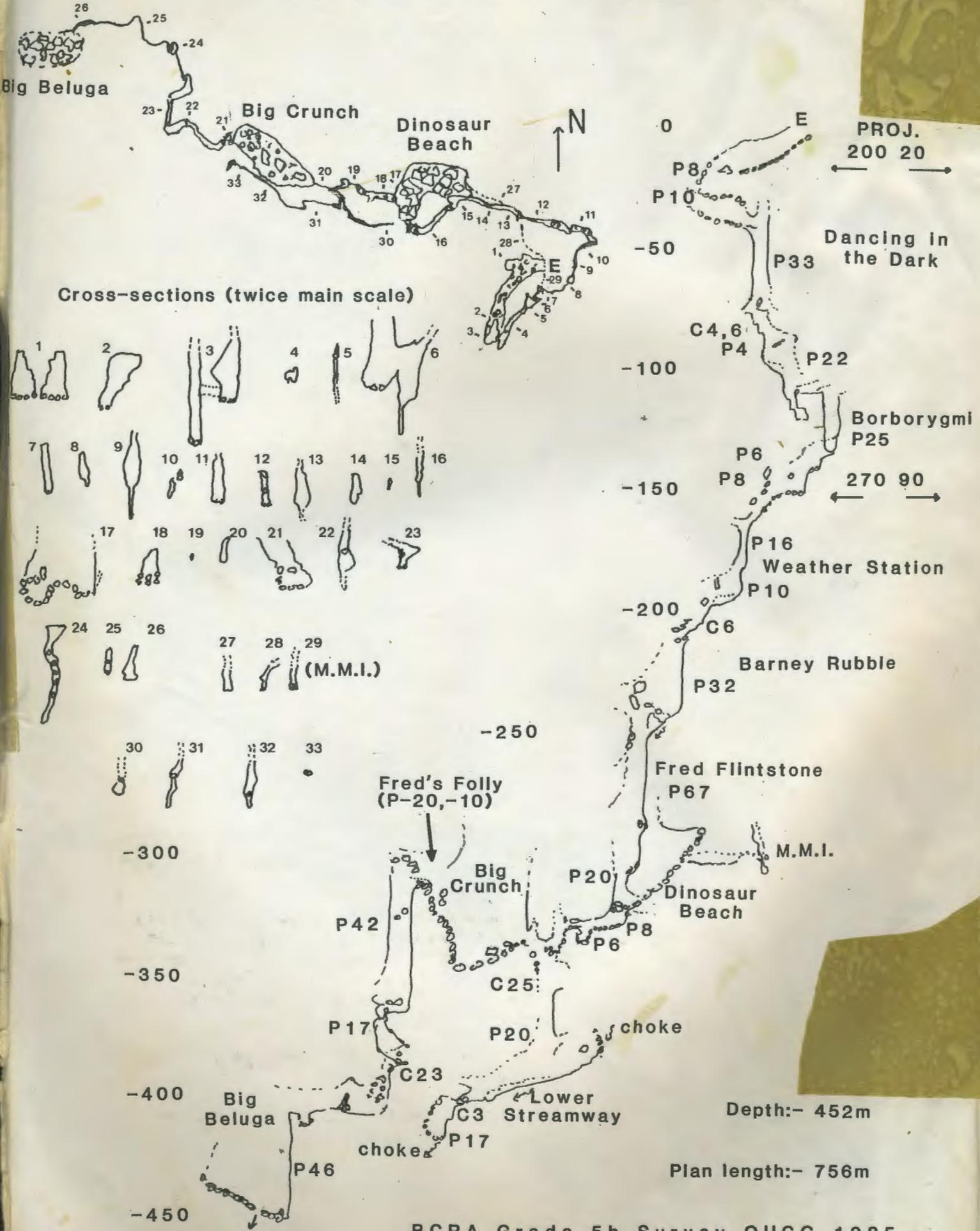
Dr. John Singleton (25), Junior Research Fellow, Wadham College, Oxford; five previous expeditions; leader of the 1981 Expedition.

Dr. Richard Gregson (29), Eye Surgeon; 6 previous OUGC expeditions, Secretary to the 1982 and Medical Officer to the 1983 expeditions.

Philip Rose (22), Graduate Geologist; 3 previous OUGC expeditions; Secretary to the 1985 expedition.

B2

SIMA CONJURTAO (1/6, F30) (RIDGE CAVE)



B3

Check the engine & motor coils checked again from by boat - moving forward?

Unload bags and boxes from boat

USTRODES

¿ IRA A CANCHAS EN EL MAÑANA

¿ ES POSIBLE IR EN SU VAN

Check all moving lines and fenders

POR VISITAR LAS TIENDAS

Have you got your ...?

- a. Car keys
- b. Boat keys

¿ ES POSIBLE VOLVER CON USTRODES - O

- a. Boat
- b. Out

VOLVER EN AUTOBUS?

¿ TIENE PAN?

¡ ULENTES, POR FAVOR!

¿ TIENE HUEVOS?

- a. You have emptied the bin
- b. You have taken all rubbish or items off the boat
- c. The electrics are switched off
- d. The tiller is lashed securely
- e. The main battery is on the boat end
- f. The mooring lines and fenders are OK
- g. Boat has to be cut

¡ UNA CARTA, POR FAVOR!

QUOTATIONS

Jonny "Thats why (he'd just drunk 3/2 bottles of wine)
the room is spinning round" Tomber.

K Ha- can't spell my name!

Dan : THINGS BELOW THE WAIST I'M LACKING
IN !

BS

To be taken up to top Camp tomorrow

2 tents
medical kit

1 gaz bottle

1 gaz cooker & petrol stove

3 sets cutlery bowls etc.

light food.

Observations

Don't think this will be a problem. The snow is melting & the ground is becoming more stable. The snow is melting & the ground is becoming more stable.

THE BELOW THINGS ARE IN!

3. (20/10/1951)

- a. The snow is melting & the ground is becoming more stable.
- b. The snow is melting & the ground is becoming more stable.
- c. The snow is melting & the ground is becoming more stable.
- d. The snow is melting & the ground is becoming more stable.
- e. The snow is melting & the ground is becoming more stable.
- f. The snow is melting & the ground is becoming more stable.
- g. The snow is melting & the ground is becoming more stable.
- h. The snow is melting & the ground is becoming more stable.
- i. The snow is melting & the ground is becoming more stable.
- j. The snow is melting & the ground is becoming more stable.

4. (21/10/1951)

1. The snow is melting & the ground is becoming more stable.

- a. The snow is melting & the ground is becoming more stable.
- b. The snow is melting & the ground is becoming more stable.
- c. The snow is melting & the ground is becoming more stable.
- d. The snow is melting & the ground is becoming more stable.
- e. The snow is melting & the ground is becoming more stable.
- f. The snow is melting & the ground is becoming more stable.
- g. The snow is melting & the ground is becoming more stable.
- h. The snow is melting & the ground is becoming more stable.
- i. The snow is melting & the ground is becoming more stable.
- j. The snow is melting & the ground is becoming more stable.

5. (22/10/1951)

1. The snow is melting & the ground is becoming more stable.

- a. The snow is melting & the ground is becoming more stable.
- b. The snow is melting & the ground is becoming more stable.
- c. The snow is melting & the ground is becoming more stable.
- d. The snow is melting & the ground is becoming more stable.
- e. The snow is melting & the ground is becoming more stable.
- f. The snow is melting & the ground is becoming more stable.
- g. The snow is melting & the ground is becoming more stable.
- h. The snow is melting & the ground is becoming more stable.
- i. The snow is melting & the ground is becoming more stable.
- j. The snow is melting & the ground is becoming more stable.

6. (23/10/1951)

Trimethoprim / 10 sulphur in it

86

OXFORD UNIVERSITY EXPEDITIONS

IMPORTANT INSTRUCTIONS

1 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 tablets twice a day for five days. You may have been given trimethoprim instead of cotrimoxazole. You should take 200 mg twice a day. You may have been given Amoxil (amoxicillin) 250 mg capsules. Take 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. (Trimethoprim)

2 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 capsule 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.

Some of you may be given flucloxacillin (Floxapen). This is also useful for infected wounds and 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.

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

4 ANTIHISTAMINES. 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 may have two drugs, Pro-Actadil and Phenergan. Each tablet of the former is of 10 mg, the latter 10 mg or 25 mg. Some may be given Piriton.

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.

PIRITON 4 mg tablets. A useful drug for moderate allergy. Take one every four to six hours.

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.

three

SLEEPING TABLETS. You have been given Mogadon (nitrazepan) 5 mg or Rohypnol (flunitrazepam) 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 paracetamol tablets. Take one or two tablets every four hours.

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.

For severe pain: take Feldene (piroxicam) one a day.

INDIGESTION. Use Gaviscon 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 (lipscreen) 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 litres. 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.

88

14 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.

15 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.

16 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 Daktarin or some similar antifungal dusting powder.

17 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.

18 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 Vermax (mebendazole 100 mg) one night and morning for three days.

19 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, or Flagyl (metronidazole) 800 mg three times a day for four days instead of tinidazole. AVOID MILK AND MILK PRODUCTS FOR SIX WEEKS. No alcohol whilst you are taking tinidazole or metronidazole.

20 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 mg 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. If you have a deserving local medical centre, by all means give remaining drugs to them. We want the drug cases back.

Bent Juel-Jensen.
University of Oxford.
Trinity 1986.

remotest * stuff to make you shit!!

Medical Kit

	Top Camp	Base Camp	Spare Box (Base)
Uvistat 10	2	3	-
Uvistat 4		1	-
Uvistat Lip	6	6	13
Dioralyte	6	5	-
Lomtil	100	200	-
Morador	-	-	all
Zetrovate	-	-	all
Phenergan	-	-	all
Ro-actidil	-	-	all
Flaxapen	-	-	all
Septin	-	-	all
Quascan	3	2	-
Anoxil	1	1	1
Zactrim	1	1	all
Mycil	1	1	-
Salprin	7	5	rest
Dress pack	2	1	6
Bactigras	4	3	-
Sensket	1	1	-
Trimethoprim	-	-	2
Dalan	-	-	4
Inmedium	1	1	-
Dacatin	-	-	1
Achromycin	1	1	-
Friely Heat Pdr.	1	1	-
Sawlon	10	10	rest
Insect Spray can	-	-	2
Insect repel. gel	1	1	-
Swabs	-	-	2
Priton	20	/	/
Erythromycin	30	/	30
Feldene (Keweenaw)	20	-	-

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 FORWARD, 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.

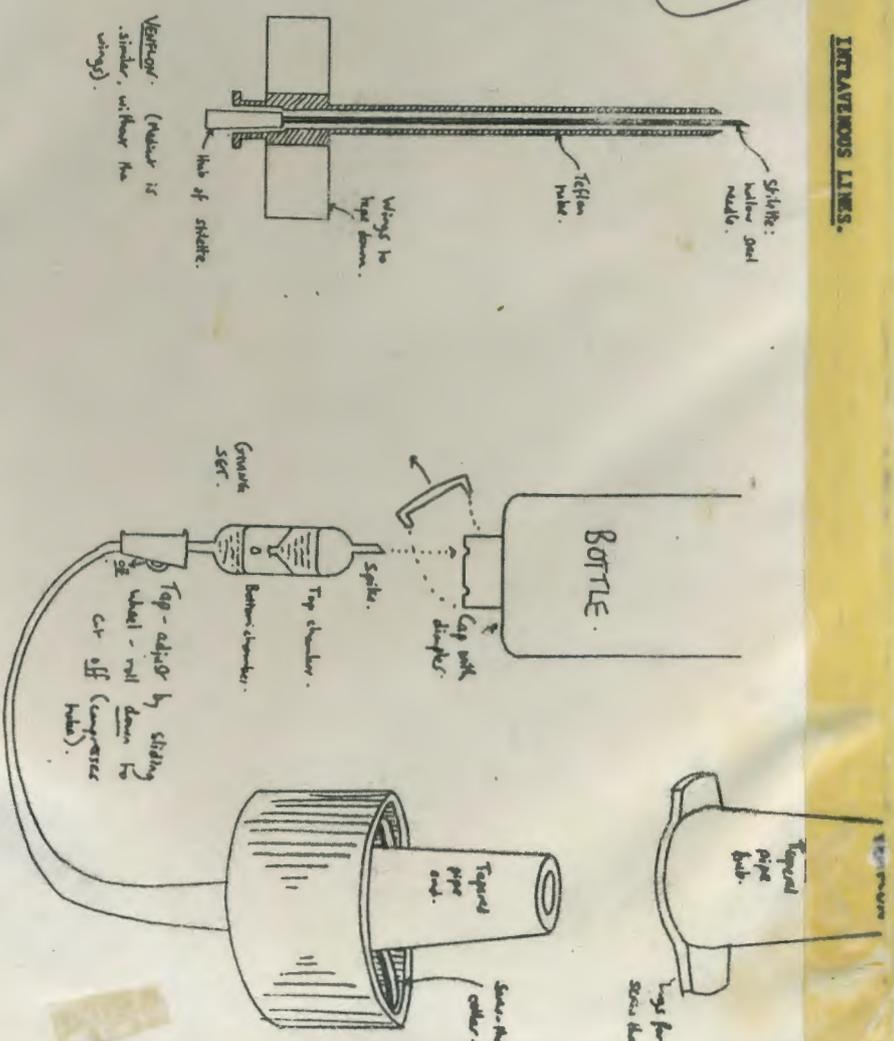
9 DEFORMITY. If either leg is bent out of shape, try and straighten it by pulling down on the foot. Support arms by putting them inside the clothing, or applying a sling if you can. Look for wounds on the limbs; these might connect with the fracture, so it is important to keep crap out of them. Put a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

1310

INTRAVENOUS LINES.



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...