

Las

Brujías



'88

Top

Camp Log

①
We were:

Sigrid "It's getting a bit shady here" Koneberg

Andi "Lirum larum, spoon and pot
geodesists eat a lot!!" Käab (Kiwi)

Ewald "Where is that meander cave?" Biersack

Markus "It's got a hole in the bottom" Niklasch

Gerhard "~~****~~ this ~~****~~ wind - STOP IT!!!!" Niklasch

Sherry "This tent is a slightly funny shape now" Mayo
(correctly)
↳ also known as "It's not fucking, that's the problem" and "I am capable"

Special guests: (sorry we can't recall all of you - effects of the sun at altitude...)

Paul B, Roy T, Jonny T, Sara & Richard G, Lynn S,
Harry M, Włodet, Martin H, Martin L, Dilla N, Phil R,

and all those de...ed sheep...

* Also known as E. "Where's this cheese spread tube 3/3" B.

Top Camp '88

After spurious investigations by V.A. Rious People
 T.C. has finally been sort of established!

Thu. 14 July: Signé & Gerhard put up tents & cooking gear

Fri. 15 July: " " " carry up mega amounts of food
 (at least as far as their weight is concerned), snow-melting
 bowls, the medical kit & their logbook. Arrive 6¹⁵ pm.

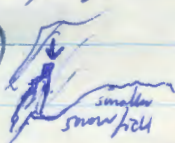
Soon afterwards visit by Phil R, Otto, Martin H & Martin L
 who announce that they're going to do no geology up here
 at all - bebothered. The weather is ever so nice, the snow
 dwindling rapidly (& even faster as we're starting to use ^{physics} chemical
 persuasion in melting it...). Maybe one of the snowfields up there
 could be tapped?

In the evening 2 hrs walk to the Jorcada Blanca pass & back. Found
 a snowfield with potentially accessible drips in a doline just west of P2.
 (The big snowfields all run off underneath, no easy way of getting at the
 meltwater). Also found a few cave entrances:

- one W of the largest snowfield, in the edge of a scree gully
 running up towards P^{co} la Jorcada. Bearings (in grades) to:

La Verdelluenga (top between two apparently highest points) 089° (80)

P^{co} la Jorcada 282° (254)

'Chimney' behind the large snowfield  168° (151)

- several around a (route?) cairn at bearings (to)

La Verdelluenga (as above) 093° (84)

'Chimney' 171° (154)

P^{co} la Jorcada 261° (235)

Top Camp 041° (37)

- there's a big snowplugged
 shaft above (15) of the cairn,
 and another entrance;

below (N) an obvious hole at the infra-
 section of two rifts (which might be blocked
 with boulders) and two snowplugged dolines
 (with black sand around the sides).

3) Entrances are unmarked as yet, need at least helmet & light for investigation (some need ropes as well).

Mon. 16.07. another luggage bag down camp... (both of us)
snow-melting is going well, filtering sort of working, no danger of dying of thirst immediately. Still it's hot up here, phew.

Mon. 17.07. Brief visit to Ridge Cave on the third anniversary of its rediscovery: Hi old friend, how are you?

Also set up first 4th order triangulation station on Pico Conjuntao. Hope it'll stand the wind, the guy strings are not very strong. (G.)

Sherry arrives in the afternoon with ^{her own} tent & a large funnel & another water container, after a glass fight against all the socks... Returns to Arto to pick up her carving gear.

G. completes a solo walk down to Base Camp, bringing another large washing-bowl, the photogrammetric camera (tripods still to be fetched) some stronger cord for flagpole guy strings, & food. Millions of glow-worms in the Ten Los Cueros after nightfall, & 5 shooting stars later on. The day closes with (a ~~moderate~~ amount of) vino that to celebrate the above-mentioned anniversary & Sigrid's having been married for two months.

Mon. 18.07.

Sherry: shaft-bashing, see below!

Sigrid & Gerhard mark two baselines for photogrammetry (unwisely, with red chalk!).

Later on the latter staggers downhill to experience the following THUNDERSTORM ~~!!!~~
from the Base Camp perspective & fails to return uphill...

The 19.07.

(3)

(4)

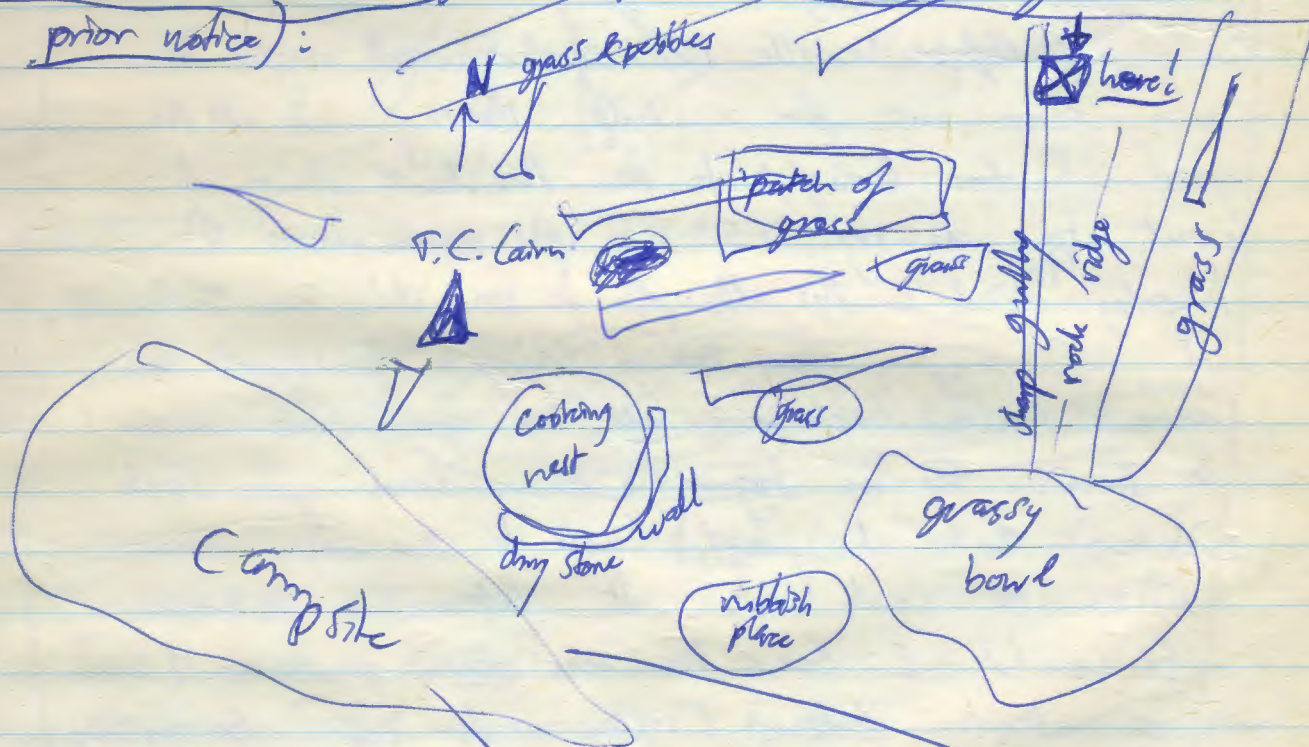
After some clearing up at Base in which K & Kate played the dominant parts Gerhard returns during the next THUNDERSTORM μ with quite a lot of metal in his pack. Think I've met Juan José Suárez González at Bobias but it could have been someone else (~~but~~ ^{I've met} him only once before at Lagos, in '85).

Wed 20.07. PB arrives early* singing all the way: 2/7 going at a P.see's drop beyond the Cemetery Gates (is this the "Land of the Undead" then?).

Paul & Sherry go shaft-bashing on La Verdelluenga. Sigrid & Gerhard reorganize the Fridge, as sketched below.

(* 10 am, U. having just got up...)

The new T.C. Fridge (subject to technical changes without prior notice):



Usage: Keep bottom & walls well covered with snow. Place goods into hole & sprinkle with some fresh snow. Put space blanket over the top & fix with pebbles. Recharge with snow at regular intervals (daily? will have to be tried out.)

(5)

↓ Sherry's page

What I did...

Arrived Monday 18th, walked up rocks south of Top camp past F17 & veered to left. Found a shakehole with 2 snowplugs + an entrance. Further up carried on up Gregoriana, Left hand end found F28, FS (looks like there might be a way on past the snow). The unmarked cave I found is:

T.C. - 330°

Calvosa Urosos 40°

Sphinx ~~to~~ ~~ward~~. 120°

Above FS I found another huge snowplug in a big shakehole, there might be a way on down on the south side but it looks like not much fun.

Retreated to tent due to storms.

Tues 19th July -

After horrible thunderstorms all night the sun came out for a while. Having used all the gear I ~~for~~ brought to tie the tent down I went to de-rig FS2 to get some more. Nearly died in the attempt to find it! Saw Martin H, JT & Lynn from the Cairn + de-rigged the cave. Walked back with all the gear (mean mean) to T.C. ~~It~~ in fog - the others had gone back down. Later I went back to the cave near F17 to 'bash' it. It bottomed - CHOKED (I was!) & the heavens opened just as I was at the bottom & the water came streaming in. Another thunderstorm, good nights sleep.

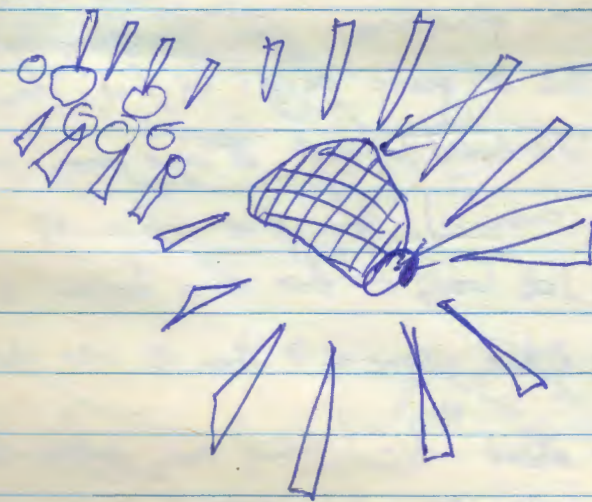
Wed 20th July

Paul arrives! We go shaftwashing...

20th July : Shaft bashing - Walked towards Verdelluenga. Didn't find much but visited big cave (doline) to right of gault, which JT and I had visited in '86. Sherry went down on my duff SRT system and got VERY COLD. It still appears to go. Marked this cave as F41 ϕ . Walked up Verdelluenga afterwards.

Cave position : La Verdelluenga 083°
 Top Camp 310°
 Sphinx 103°
 Ridge Cave 296°

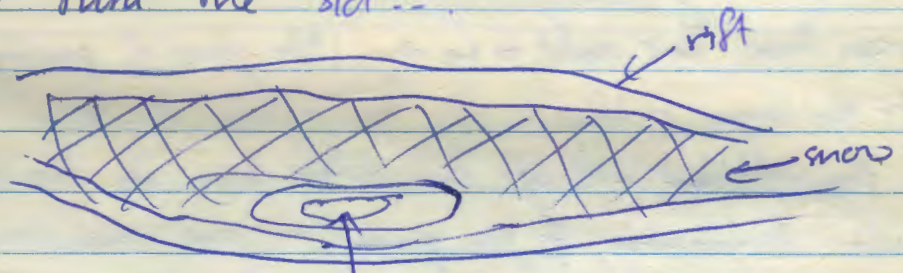
Gully with Boulders →



Snowplug in shake hole

ab down to ~~the~~ boulders + slot in floor with way on beyond

What I saw thru the slot...



hole down which boulders rattle.

This cave is COLD

r.s. don't forget your sit harness - you may end up using some crappy bit of tape!

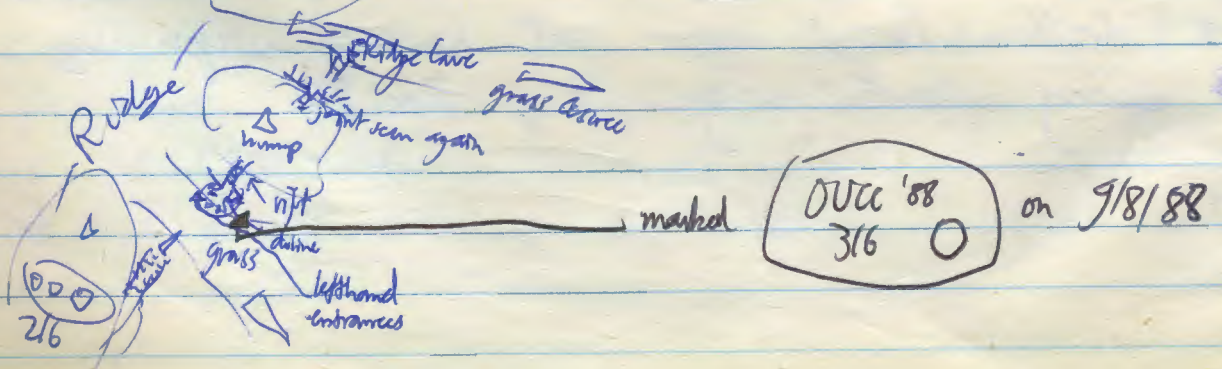
20/07. Sigrid & Gerhard mark three further baselines for photogrammetry & note that the signs of the first two seem to have been washed away...
 Paul & Sherry return to Arvo in the evening.

21/07. Top Camp Survey Staff gets up at 6^{am} (!) only to find we have to wait till 9-ish ~~before~~ before the clouds finally retreat and the sun illuminates the slopes around F20. Then spend three hours taking one stereo pair (& doing all the associated measurements) after which the clouds, rising & spilling over the Ridge again, don't give us a chance at even starting to work on the next baseline. Slow going...

Since nothing far can be seen in the mist, G. decides to have a general check of one of his 'million' geological questions viz. tracking the Ridge Cave entrance fault towards 2/6. This is quite easy! In fact, from the grass slope at the NW foot of the 2/6 hillside (the next large grassy patch south of the one passing by Ridge C. entrance) there is a gaping rift with a rather shattered doline underneath. (I'd looked at this once before, in '86 on a misguided search for F20; it had snow in it then & was drafting.)

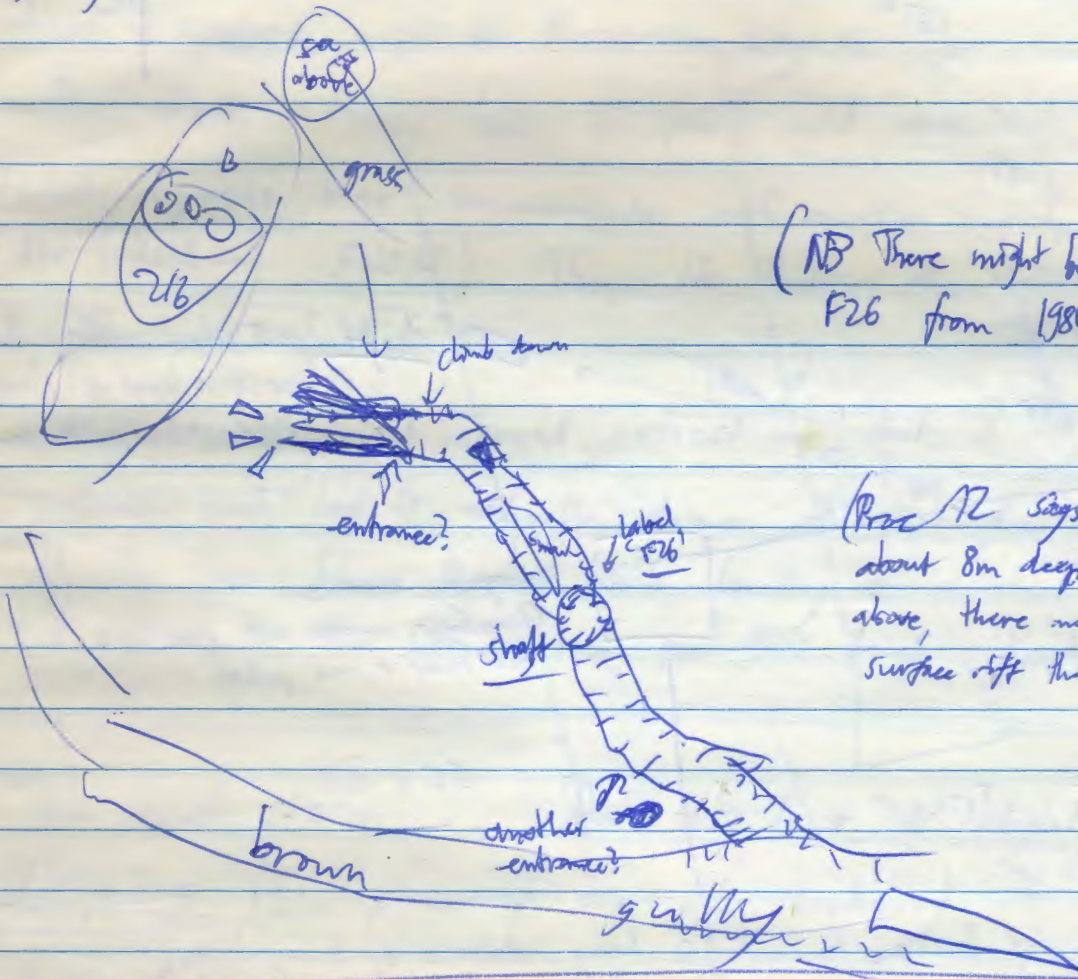
The rift itself is too narrow ahead (1-2 inches) and choked with large & very sharp boulders downward but with a lot of black space underneath between these. This ought to be dug. (Use gloves & possibly dings & ropes to shift the larger pebbles.)

In the left-hand wall of the doline there are two openings (or one which branches immediately, if you prefer) - one route seems to follow the funnel and re-emerge at the deepest point of the doline, while the other is heading down & away from the rift (i.e. towards 2/6). Wish my helmet were up here...! This to be (3/6 2)



⑦ Downhill from there, in general direction Top Camp, I stumbled across ⑧

F26, marked as unexplored: A long twisting rift with sharp walls & a steep floor of similar boulders, with some snow just above a shaft & one or two other possible entrances, eventually ending as a tributary to the 'brown gully':



(NB There might be more than one F26 from 1984.)

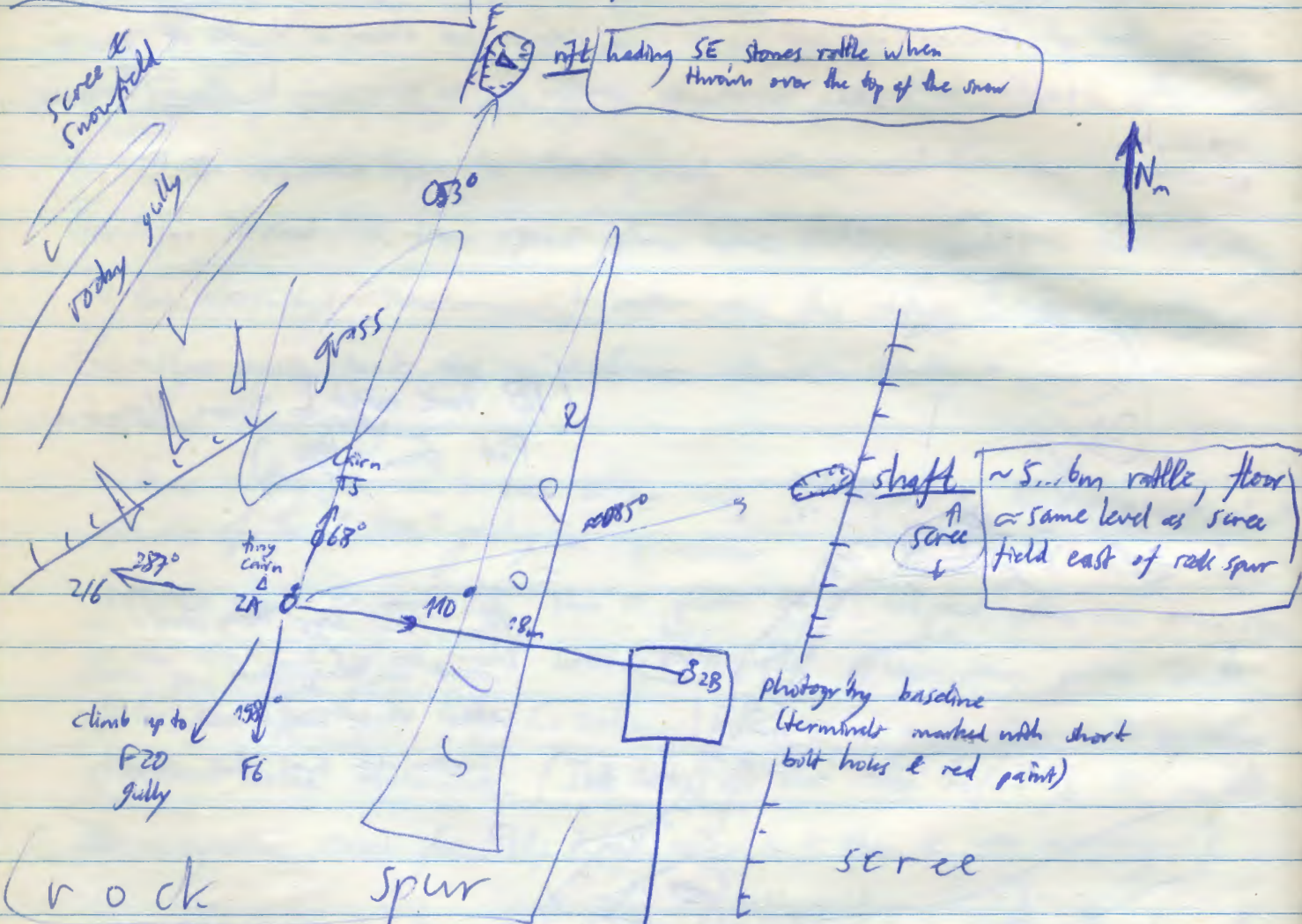
(Proc 12 says the shaft is about 8m deep but, as stated above, there may be more to the surface rift than that shaft.)

The fridge doesn't work too well - all the snow gone. Why does it melt during the night? Still it's a cooler place to store food in than the tents. 22/07/88

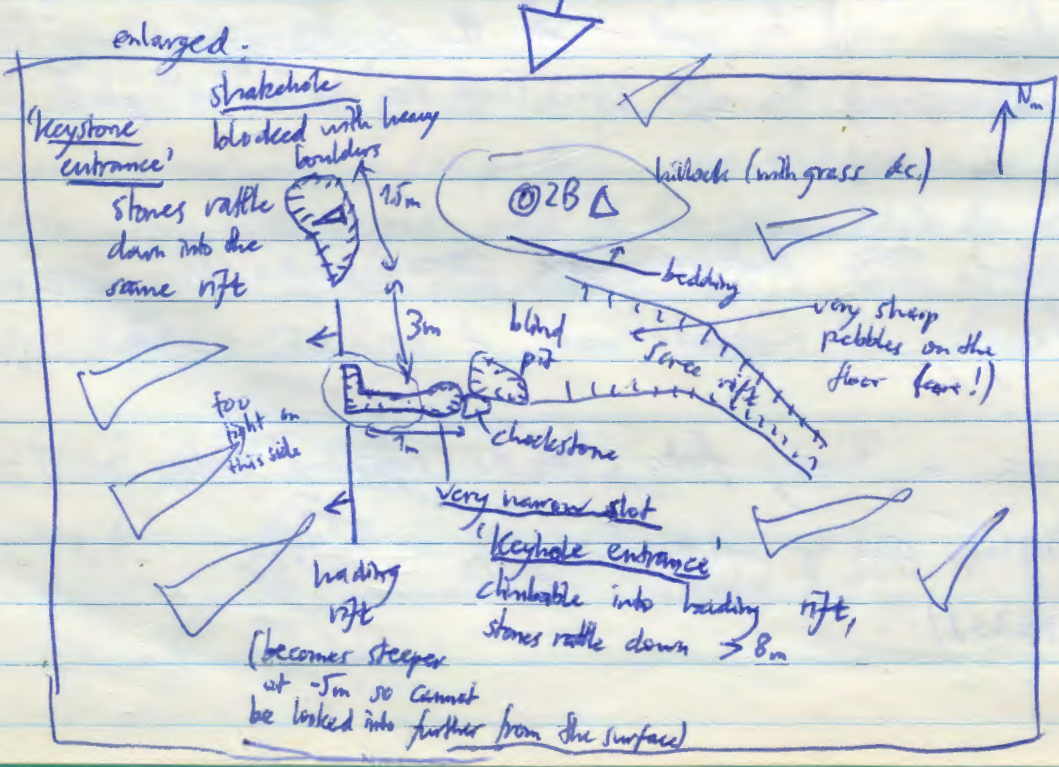
Sigrid & Gerhard take photogrammetric stereo pictures from three further baselines (camping 3 rockcaches' worth of equipment between us).

G. discovers a 'tuning fork' (on the righthand (looking uphill) bypass of the directissima climb up into the F20 gully, on the lefthand wall, giving a B flat when touched).

On the rocky spur straight below F6 there's a number of unexplored entrances:



NB precise location of baseline terminals is being established by triangulation.



I spent ~80 minutes clearing pebbles half my own weight each out of the 'keystone' entrance ('keyhole' wants a helmet & an overcoat unless you want to be shredded to bits). The second largest boulder in the shakehole is loose - don't trap your feet. Needs either a pulley or a chisel (to chop it in half) to remove. Entrance now almost negotiable. Still, 'keyhole' though almost a squeeze might be the easier way in.

Both these entrances have a faint cold outward draught (which suggests they communicate with another entrance higher up the hillside - F20??). They lie below the distinctive dolomite band containing F6.

(Maybe a geologist could correct me, but I believe that yellowish rock bed is actually former dolomite from which all the MgCO₃ has been leached away, leaving a mixture of calcite & silicates - the German term for this being 'Rauhwaacke', 'rough waacke'.)

The next storm... Dave H's tent is slightly demolished. (One piece of one pole broken.) It is re-erected but has now a somewhat funny shape...

23/07/88

Night temperature drops below the freezing point.

Andi 'Kivi' Kieb, geodesist, and Ewald have arrived, and reach Top Camp in the early afternoon (led by Gerhard who again had preferred to walk the announced 200 km/h gale from below yesterday). Ewald reconstructs Dave H's tent, it is now a slightly less funny shape and serves as food & baggage store & spare sleeping tent. Andi's bright blue dome tent adds colour to the site. Siegfried & Gerhard deal with the fifth & hopefully last photogrammetry baseline. The broken signal flagpole on Conjecture from a week ago is replaced.

24/07/88

(217 ^W must now be O.V.C.C.'s second deepest exploration, the 60m shaft beyond last year's limit having passed the Sima Conjuntas depth.)

25/07/88] Andi Kivi walks to Base & returns with the heavy big DKM2 theodolite & even heavier tripod & equally heavy 2m base rod. Also discovers another clean, shady & very useful snowfield just north of the camp, and manages to repair the broken signal flagpole (employing mainly a bolting hammer).

Sigrid & Gerhard embark on a trip around the bowl with the smaller DKM1 theodolite to triangulate some photogrammetry baseline terminals & fixing points from Marcus Wandinger's network ^{simultaneously} stations. Ewald is taken along on a guided trip to the entrances of Paradise, F20 Ridge Cave & 216 & is otherwise being positively bored by the photogrammetry baselines.

26/07/88] Andi puts up further signals on La Verdellunga & La Rosa, as well as route cairns all the way to Los Canalizos (= 'X' valley). Leaves Sigrid there who walks to Arid with processing equipment.

Ewald & Gerhard walk to Base v. early & go shopping, returning around 8pm. Everything up to & including the Vega de Atiscada is drowned in heavy clouds, up here it had stopped raining only 5 minutes earlier. Ewald applies a bolting hammer to Dave's broken tent pole & succeeds in re-erecting the thing in almost its original shape. Very pleased with this result (justly so) he moves into it; the tackle is now in the porch. Gerhard leaves again for Arid.

NB There is no rigging gear whatsoever up here except two tape slings one of which is needed as a guy string for Dave's tent. What are the four ladders to be attached to ???

Sigrid reaches Arico in the early afternoon after ⁽¹²⁾ ~19 hrs in the ^(27/07/88) midst of nowhere & a rough night (high up in area 9, probably). She & Gerhard spend the ^{following} night turning the Refugio into a photographic laboratory. Most of the plates are underexposed. Better do all of them again.

Ewald walks up to the Jorcada Blanca pass, finding a new shaft so he goes, and decides Pico la Jorcada would be a grade 2 climb. Andi re-measures some Wandinger network distances with the base rod & theodolite & due to the wind, ^{only} an accuracy of a few mm per 100m is attainable (still better than what's possible with a steel tape measure).

Gerhard pops in for a short visit in the afternoon (to pick up 217 survey station coordinates from his field notebook for William).

Found a new entrance on the Verdelluenga side of the standard (?) route to Top Camp — when you enter the bouldery gully after the long grassy slopes & the Vega de Abiscada is no longer visible, turn sharply to the left ^(east) & follow the obvious joint until after ~100 ft a rift opens in the righthand wall. Depth > 8m. This is in Barcaliente limestone & thus might not go very far.

Sigrid & Gerhard return from Arico planning to re-do some photos in the afternoon but the rising clouds prevent all work & make life for Andi rather difficult ("Come on Verdelluenga, where are you?") [28/07/88]

Ewald walks to Base & returns with saving gear (it also Gerhard's helmet, three cheers!).

Dinner recipe: Chives stew

Boil pasta & fry 1 onion & ~~1~~ 1 capsicum. Add 3 eggs, 3 tomatoes, herbs & spices & the fried veg to the pasta, as well as a generous amount of wild Jorcada Blanca chives & jamón (not bought on the hill, what d'you think!).

13) Yet another cave entrance ¹² ~150m east of FUS6 wants exploring. It is a conspicuous 2m x 5m slot on the verge of the very large scree field at the knees of Punta Gregoriana just where a spur of metamorphic limestone juts out to separate it from a less huge one on the Verdelluenga side.

Loose shaft 10m deep & not climbable lands on a heap of snow sitting on a boulder slope, downslope passage appears to continue. Looks like it's going to be a pig to rig as the fractured rock at the entrance won't bear a bolt & the only convenient naturals are several feet away & don't look too stable either. Ladder & long tether & no welfare?!

The hole fits the description and rough location of F32 but I couldn't see an inscription. Either whichever piece of rock ~~used~~ been honoured to support the paint has fallen off in the meantime, or it hadn't been painted, or it isn't F32, though it's such an obvious feature that it must have been noted before.

[NB F31 is marked as bottomed but has to be looked at by a geologist. It is close to the foot of the grass slope leading up towards Ridge Cave, in the massive Picos limestone but actually touching the thrust so that its northern wall underneath the grass would be breccia and/or Barcaliente. The thrust itself is nowhere clearly exposed, usually it is visible only as the sharply cut transition from Picos lste. to grass/scree (mixed Picos & Barcaliente pebbles) with solid (or metamorphosed) Barcaliente only appearing a few metres further north, so F31 might offer a unique opportunity to look at the thing from inside & not far from the surface (the next best place being Borborguni!!).]

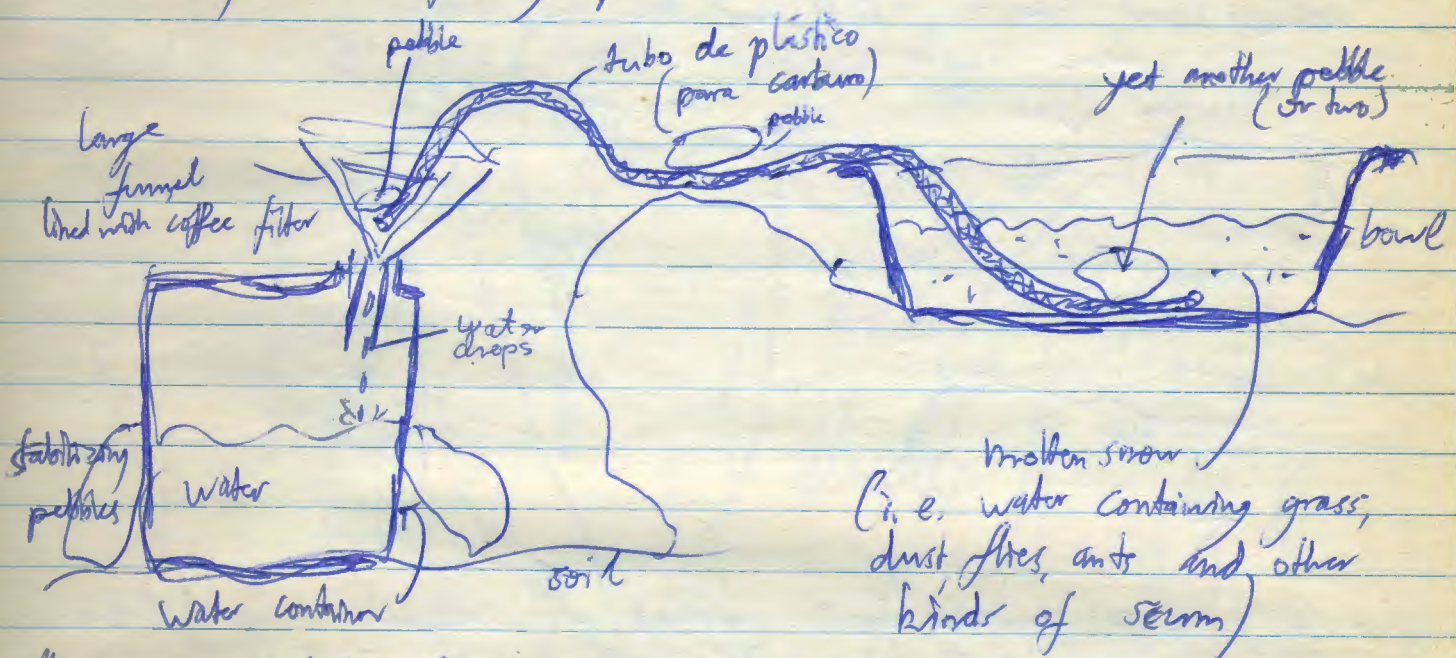
At nightfall the clouds close in above us & begin to discharge a heavy drizzle...

The rain in Spain falls mainly in the plain, ¹³ (14) 29/07/88,
but sometimes also T.C. is enshrouded in wet clouds.

G. walks to Base & back in the afternoon to fetch bacon
for the lentils stew (I also to get some more food & carrying gear &
vino - T.C. being run on a "kitty plus" principle at the moment -
and to hear that the Poles have arrived, hi there!) Upon his return
the clouds are breaking to a reflection of sunset.

Bad weather has been announced for tomorrow, but maybe
this time it'll stay in the plains.

T.C. Invention Nr 357: Ewald's automatic (well, ^{7351908/3} 30/07/88
almost) water altering plant. Cross section:



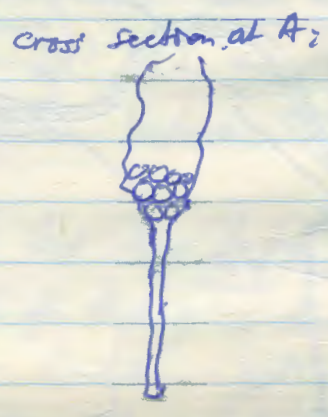
Effect: no need to fill the funnel with water every 5 minutes.
same level of water in funnel and bowl.

"He Sonne scheint!" ("The sun is shining!") Ewald's morning call
rouses us all to a lovely bright (but not too hot) day.

He & Andi Kiwi set out on a trip to the tops of Pico la Jorcada
and the Torre de los Traviesos for theodolite observations, leaving
más signal flagpoles behind (much to the delight of the Poles who find
something they can aim to!). Sgrid & Gerhard re-do three stereo pairs of

(15) the five. While Sgrid & camera are up near 2/6, Gerhard sets out to look at some holes beyond the little col where the ridge rises again (towards P^{oo} to Jorceda? is. south). Four holes were investigated (from left to right (bearing from marked survey station T8 north of 2/6 main shaft)):

- 1) The obvious cleft at 100° is an outlet not an entrance. Easy walk/climb upward to the foot of a now roofless aven. Fluted & scalloped walls.
- 2) (at ~~160°~~ ^{160°} ~~not behind a hillside from T8~~) is a ^{vertical} joint(?) controlled rift best entered at a +4 ft traverse level to avoid a floor-level squeeze. At floor level it chokes after having narrowed down to 4 inches. The traverse level rises to +10 ft and then also chokes.

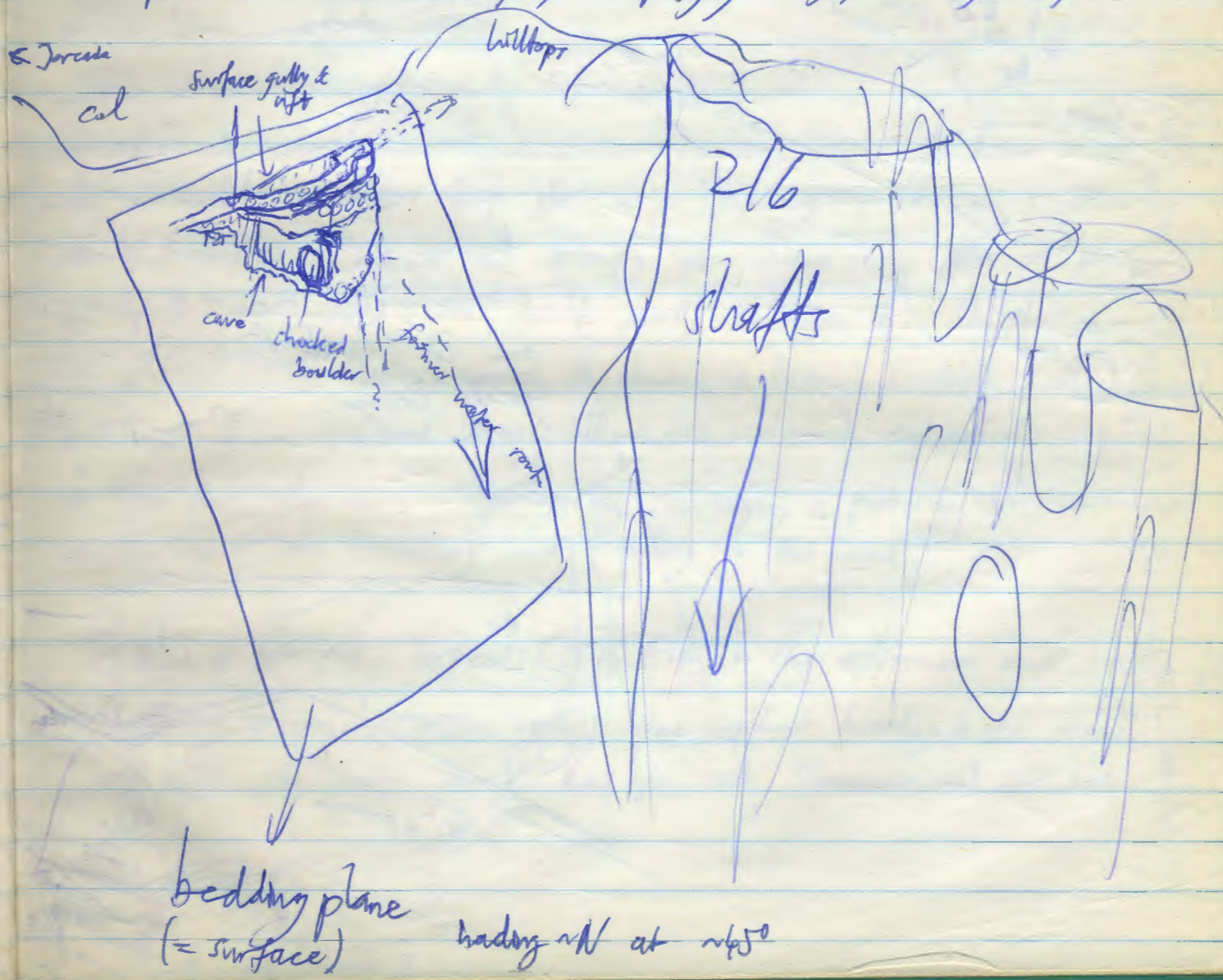


3) (at 165°) is an amazing fossil swirlpot with scalloped scoops & flakes on the intersection of two joints. Boulder floor visible or (in one place) audible; but worth a descent. (1.8m, climbable with care & a helmet). (Which I didn't happen to have on me.)

4) (at 170°) is an inconspicuous manhole at the foot of a little cliff which leads to a crawl under a boulder and then chokes 3m in. Why or under boulders?

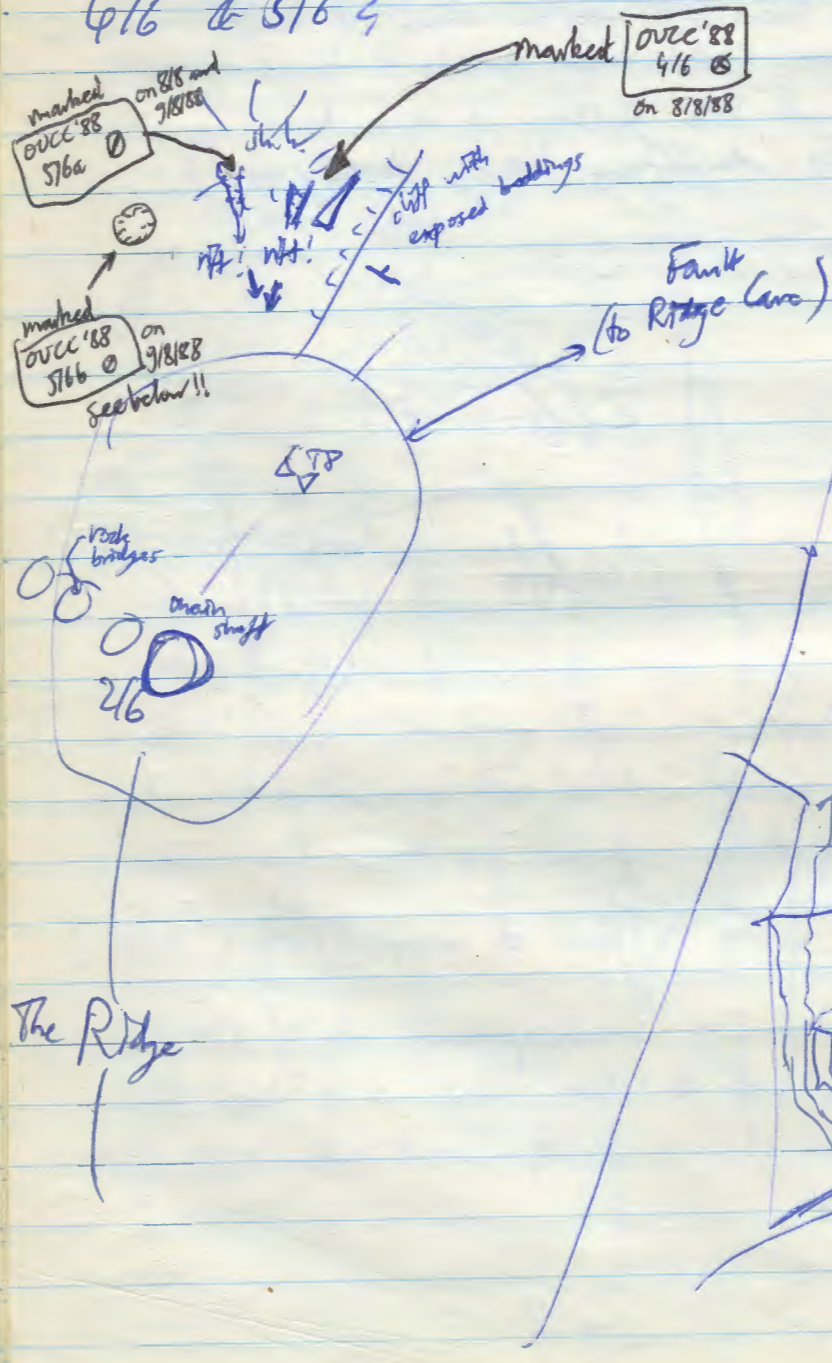
Going back towards 216, the former water¹⁵ course from Mr. 1 above to 216 can be picked up as a meandering scree gully along the massive beddings rising up towards the hilltop & 216 entrance. Only the ripples tell that the water flowed north, opposite the present direction of the surface slope. The feature ends in a little alcove, once upon a time a wet pitchhead. At the foot of the gully a lower level may be entered: this is F25. A Tolly Wife-size canyon can be walked into with a headtorch, the odd hole in the roof ~~to~~ admitting rays of sunlight to enter at one place one has to duck under a boulder. A little bit on (a 15m in) a 4" rift joins at a sharp angle from the left (also visible on the surface) and ahead the loose boulders & scree floor rises towards the former rear wall of the pitch. If there is a way on down it must be buried under the floor.

Attempt at a 3D sketch & slightly simplifying things, looking in:

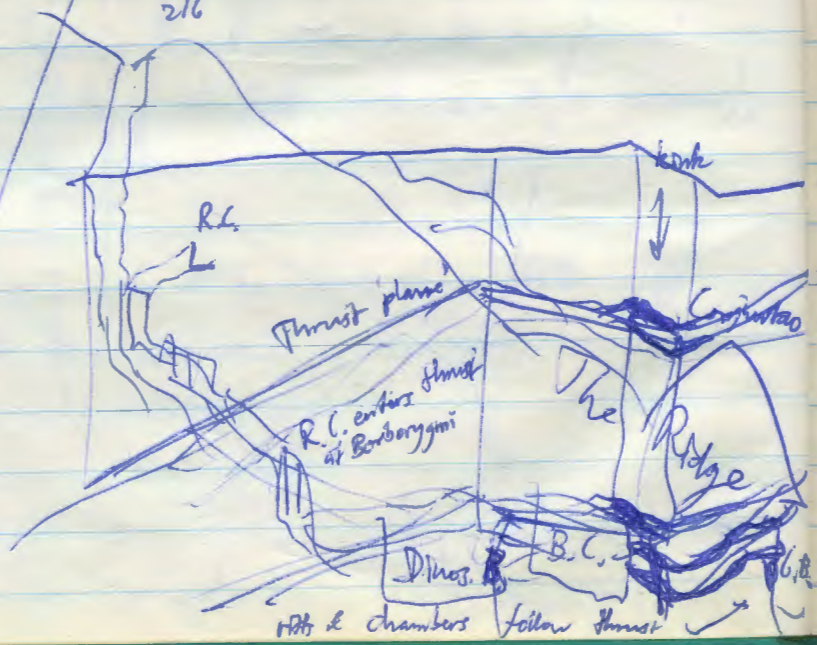


(17) whoever was the unlucky '84 caver who climbed up all the way to this nice but too short cave and turned back some 30 yards before the (then unlocated) 2/6 3/3

F25 isn't the only remarkable piece of paleokarst around 2/6. Just north, on the route to Ridge Cave, where the usual path follows the rear side (western) exposure of the beds of thinly bedded limestone which are so conspicuous on the eastern side (& which probably continue down to Nuck's Canal in Ridge Cave), a big bouldery shalestone contains two further spectacular entrances, on two rifts trending towards an intersection. These might go to a shortcut down to the Bladerunner, 4/6 & 5/6?



G. also takes stereo slides (non-photogrammetric) of the western continuation of the thrust beyond the Ridge. The most remarkable thing that catches the eye is a northward kink paralleling the one of the passages from Big Crunch / Fred's Folly to the Great Beluga. 3D view from NE:



Dinner recipe: cog-au-vin risotto sans ¹⁷ cog
(produced under Sigrid's direction).

(18)

Sunday 31/07/88

Again a very early start for Sigrid & Gerhard to re-do the two westward-looking photogrammetric stereo pairs in the light of the morning sun. By now we're a lot more efficient than a week ago...

Ewald goes to Lagos to pick up food & gear of Markus Malesch while Andi & theodolite brave the sun & wind atop La Verdelluenga.

In the early afternoon we're suddenly showered in by visitors:

Roy (on a brief detour from a downhill walk Arrio → Base), Włodek (from Polish T.C. to Arrio), and Richard, Sara & Harry (en route to the Peña Santa). Brew for everyone, while water & petrol last...

The wind is rising.

01/08/88

At night, little sleep for us. The gusty storm is tearing at the tents. Rather too strongly at Dave H's, ~~at~~ at present inhabited by Ewald, who has to partly collapse it. In the morning we pack it and Markus carries it down to base. Ewald's (single layer) tent now serves as a food store. The wind doesn't release its grip till far into the afternoon. Hardly any surveying is possible, the instruments on the tripods are trembling and howling in the wind...

Ewald & Gerhard inspect F15 & F16 in the afternoon and bottom them - no way on in the latter, none without blasting in the former, still quite nice shafts for this kind of rock (Barrabienso). (See below.)

02/08/88

Weather turns miserable & all except Gerhard soon

(X) retreat into their tents. G. walks to Base & drives to Lagos, gets stuck each way in the roadworks (blasting), and upon his return to Base finds all the large tents collapsed, a cloudbreak pouring down, and the White Van shaking 2 inches in its springs, the whole illuminated by spectacular lightning. The rain stops, the wind doesn't, full glasses are blown all across the Lower Bar where MPC + Wlodek (+ YUCFC) are collecting a world-record pile of empty cerveza bottles. G. returns to Top in the returning rain, unable to face yet another tent-reerecting night at Lagos.

03/08/88

It rains all night, and not a little, until well into the following morning. A hot tomato stew ^{*} coaxes everyone out of their tents. In the early afternoon Kiri rebuilds a couple of signals and takes some readings, fingers frozen; the temperature can't be much above 0°C. Ewald & Markus set out to push F14, returning after nightfall. (Again, see below.)

~~04/08/88~~

* during which Gerhard BLEW UP his petrol ~~store~~ stove
("A bonfire for the end of the rain ...")

04/08/88

Bright morning. Markus goes down to Base Camp which in full winter clouds. Gets lost (but not too bad) on his way back. Meets Ge', Sigrid, Kiri ~~on~~ on their way to Aris to process the last stereo photographs. (which she ~~could~~ ^{had been able to} take just before the clouds had come up).

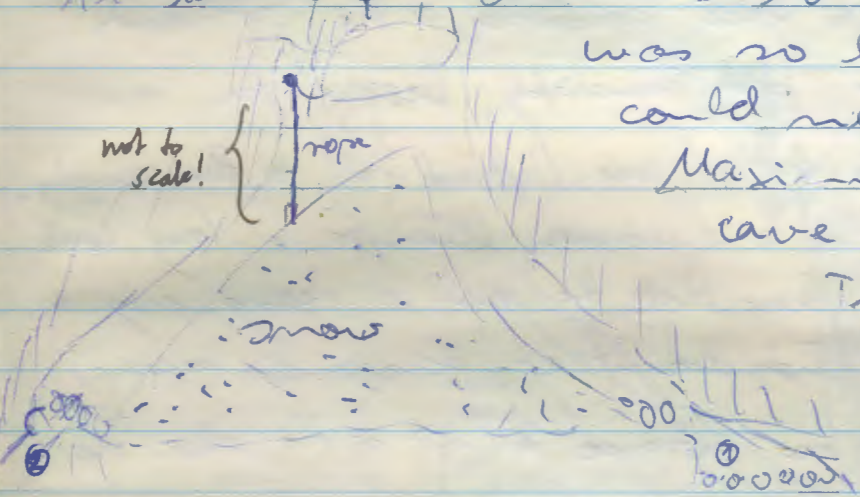
Ewald leaves T.C. as well. He had had a look at F2 and then waited for Markus with the dinner. Ewald catches a terrible ^{sun-burn} "Sonnengrand".

Markus remains alone at T.Co. Wonderful silence and peace - slightly disturbed by heavy down beats that can be heard from Los Lagos.

Gerhard Miklasch + Ewald blessed

The Entrance can be seen from Top Camp
a little bridge divides it into two holes

At the left we set a bolt, for the snow
was so low, that you
could not climb down.



Maximum ^{depth} height of the
cave is about 20 meters.

The snow-cap in the
cave had a distance
to the walls
from 0,5 to 4 meters

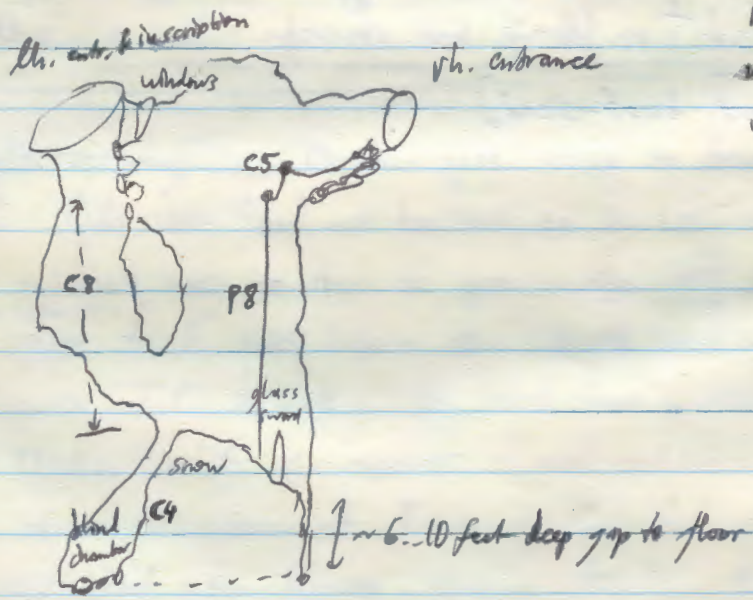
It is resting on a pebble-and bolder's ground
It is very unlikely that there is a way on
under the snow. At point 1 you can crawl in
a little "appendix" of the cave, about three meters
long and with a floor of pebbles.

At point 2 we digged a little, for there was
a cold wind coming out, ~~and~~ But there is no way
on for a human-shaped body. A little dog could
go in to a rift that is even too small for it.
(The opening is about boot-sized.)

Spille

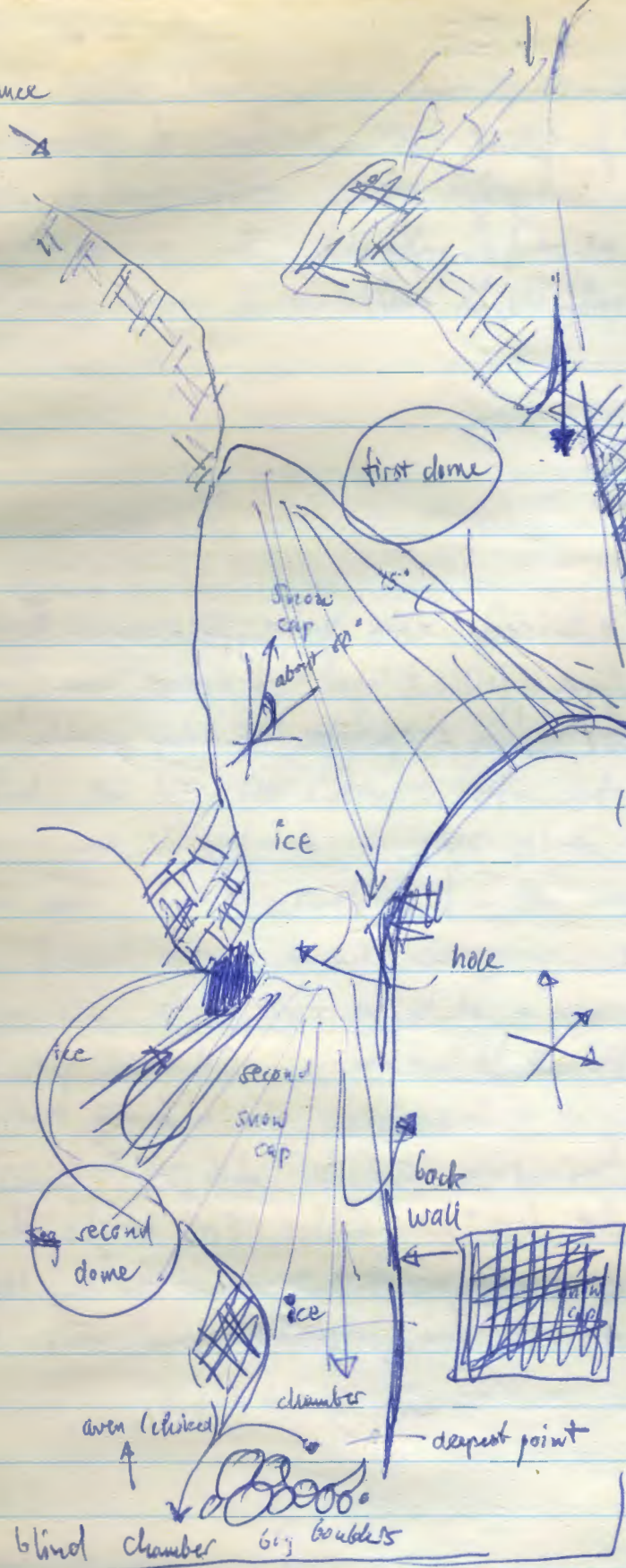
Having carried the shaft-bashing kit across from F15, we enter the cave via the righthand entrance leading via a ramp to a shaft well inside the hillside, & establish voice connection to the lefthand entrance which gives onto a pitch immediately. Descend from a natural backup & two bolts in dubious rock (lefthand wall) to the snowing. A 'glass sword' of ice is sitting in a corner. Otherwise, a long walk around the edges only confirms that the snow is resting only on a solid floor of pebbles. Such draught as occasionally becomes noticeable just goes in at one entrance & out at the other. The lefthand entrance pitch is accessed from below by a bold step from the snow onto loose scree & is almost free-climbable to the top (with great care & a certain amount of madness). The whole thing is in an unusually white variety of Barcarlante limestone - (leporite? or maybe a 1st. bed that belongs even below Barcarlante?).

Sketch elevation, looking NE:



(In years with much higher snow levels it may be possible to enter without tackle)

Entrance



* G.B. & M.N., 3-8-88
 - extremely difficult to be rigged -
 no piece of solid rock around the
 entrance. - Rigged with 45m rope
 and 50' ladders for safety,
 could be done without.

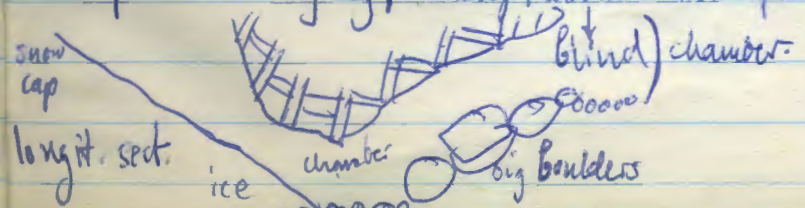
Opposite to the entrance
 there is a solid wall.
 - To the left, \approx 5m beneath
 the top of the snow cap, at
 the corner of the first dome,
 a very small pitch leads down.
 M.N. tried to climb down,
 gave up: too narrow, no footholds,
 risk of being stuck. ^{would require an}
^{other rope, might}
^{continue!}

- To the right, still ^{deep} ^{point}
 the back wall, the ^{beginning} of the
 snow cap (about 12m beneath its top)
 becomes icy. A hole leads
 further to a second dome with a
 second snow cap. The left wall
 of this dome is still the
 same 'back wall'.

- It is possible to go around the top
 of the second snow cap. A corridor
 leads under the 'hole' and under the
 boulders that seem to ^{bar} ~~be~~ the first

snow caps. No way on: after \approx 2m everything is blocked with ice.

- Obvious (and only) way ^{on} ~~out~~ ^{from} the second dome: still along the 'back wall'. Snow
 cap becomes very icy. See longitudinal section for looking towards back wall. Any possible



way on is choked: the addition to
 the description from 4-8-84.

(23)

22

5/18/88 Markus at T.C. ~~lays~~ half asleep on the grass in the sun, keeping the sheep away, waiting for Gerhard who comes up in the afternoon and then goes to T8 to continue surveying. Markus on T1 with the other Theo, trying to get some information about the refraction.
 Sigrid and (later) Ewald turn up as well.

6/18/88 Sigrid & Markus down to Base Camp with her luggage including tent, photogrammetric camera and tripods. Markus goes up in the evening, but no further than to Ario. Gerhard descends to Ario with his box of stereo slides for a viewing session at night.

7/18/88 Gerhard, Markus spend the night at Ario Refugio. Andi "Kiwi" guides Markus to T.C., while Gerhard goes to Base C. first* - Found T.C. as Gerhard had left it the day before. Andi goes surveying. Markus spends the day lying in the grass in front of the tent and reading. Wlodek comes along. Gerhard turns up at sunset. *to drive Sigrid to Arriadas

8/8/88 - Another beautiful day. Ge & Ma have a look at the ~~possible~~ cave entrances now unmasked 416 and 516, the latter being the more promising: there is much draught. See below!

In the afternoon both surveying from 5A, 5B and T7, where they get cold (T7 being already in the shadow of the Picos).

9/8/88 ^{Gerhard} ~~Gerhard~~ considers it to be more efficient not to go surveying together: while ~~Gerhard~~ ^{he is looking} ~~looks~~ through ^(not really) his ^{theodolite}, Markus descends 516 - just to find the bottom of the pitch in daylight!!! See below. Takes him some time to find the lower 516 entrance from outside.

After a picnic lunch a 516 photo tour takes place, Gerhard entering from the upper entrance, Markus from the lower.

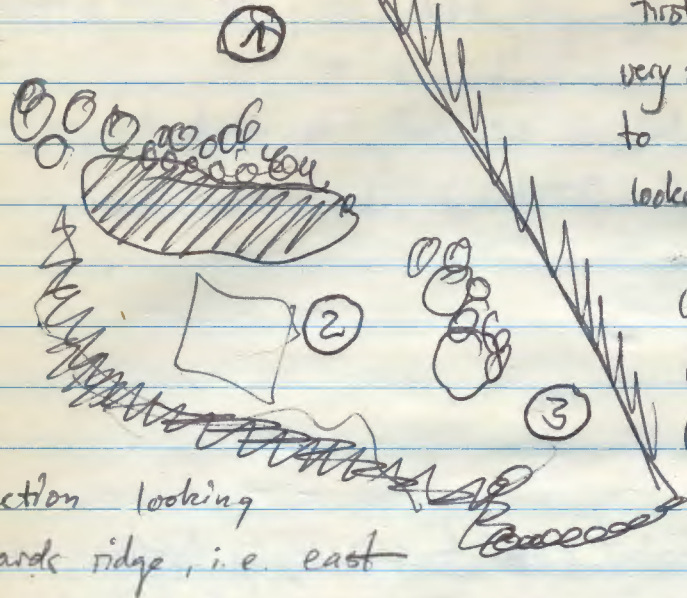
Then Gerhard returns to his surveying, Markus begins to drill another bolt in 516 since there might be a way on - see below. Interrupts himself when his light fails, creeps out of the rift ~~at~~ with the remaining daylight, finds that ~~it~~ it is late enough not to descend once more but to return to T.C and to prepare dinner for Ge and himself:

Carols fried in oil with garlic. - Meat balls (spanish tin) and peas heated, using the meat ball sauce, some additional water, some wine, Oregano and spices. Served with rice.

416 ~~X~~ (818/88) (23)

24

6



First entrance to be seen was a black hole, very narrow, leading from the shakehole ① to the chamber ② which, from outside, looked like the head of a pitch.

Gerhard succeeds in widening the entrance by kitzing down some boulders (of remarkable size...)

finds a way on: to chamber ②

section looking towards ridge, i.e. east

All the boulders of the ~~ground~~^{floor} of this part of the shakehole rest on one megabig boulder that is chocked between the rocks. Beneath this, there is a chamber ② which gets some daylight also at its far end where the super boulder does not ~~more~~ touch the rock any more. From the chamber ② one can go on to ③ to find it all chocked with boulders and gravel. X

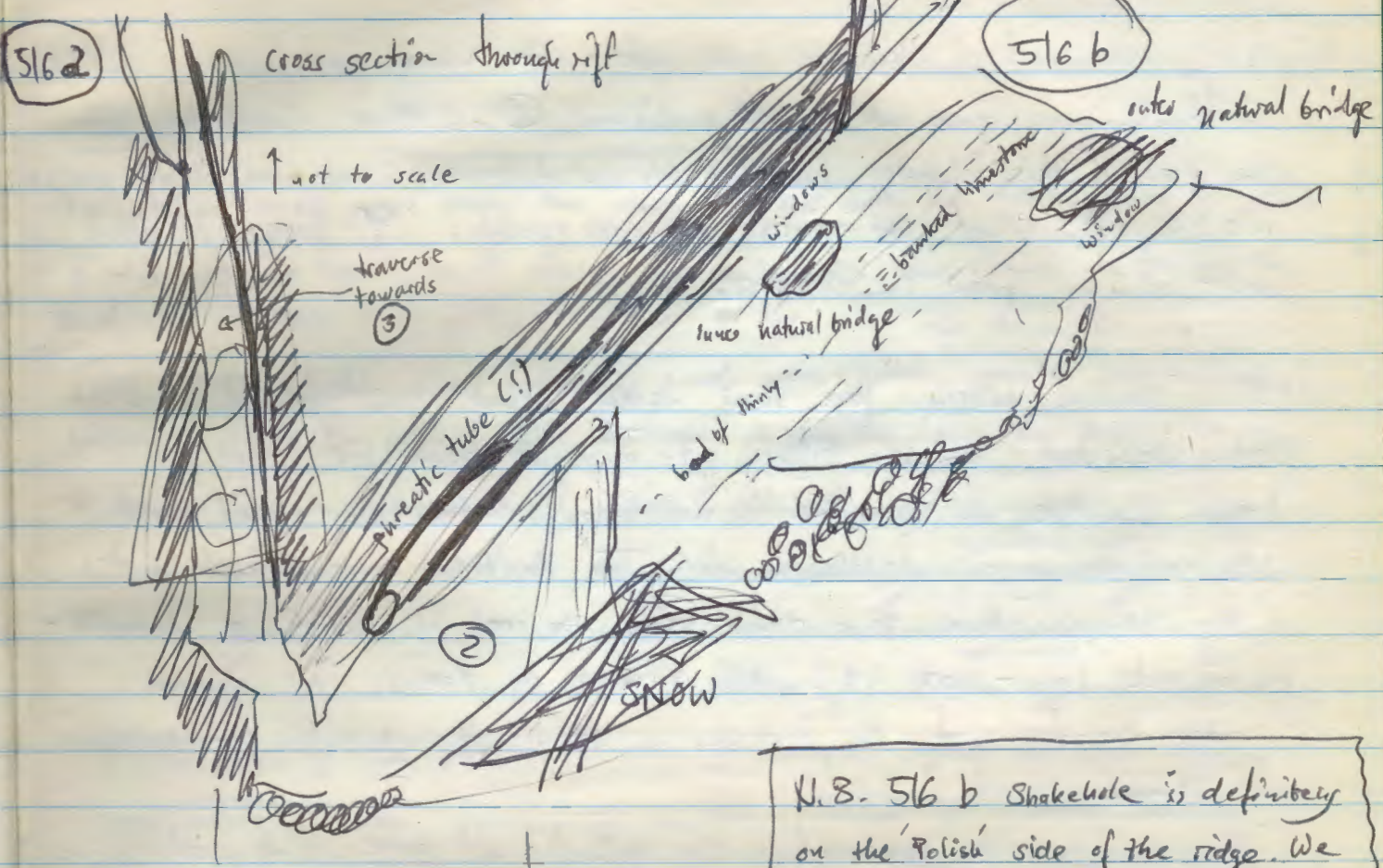
③ being an impressive former stream canyon with clean-washed, fluted walls, almost a metre wide - but very definitely filled up with boulders, & it doesn't draught. - The whole thing is now free-climbable, depth $\approx 10m$.

PS: Digging by the method known by one of the names 'house of cards', 'Mirado', 'touch the keystone',... is recommended only for people with strong nerves and a lifeline*. Everything underneath me started moving when I thought I'd just picked up a little thing lying on top of a boulder...

(* which I happened to have)

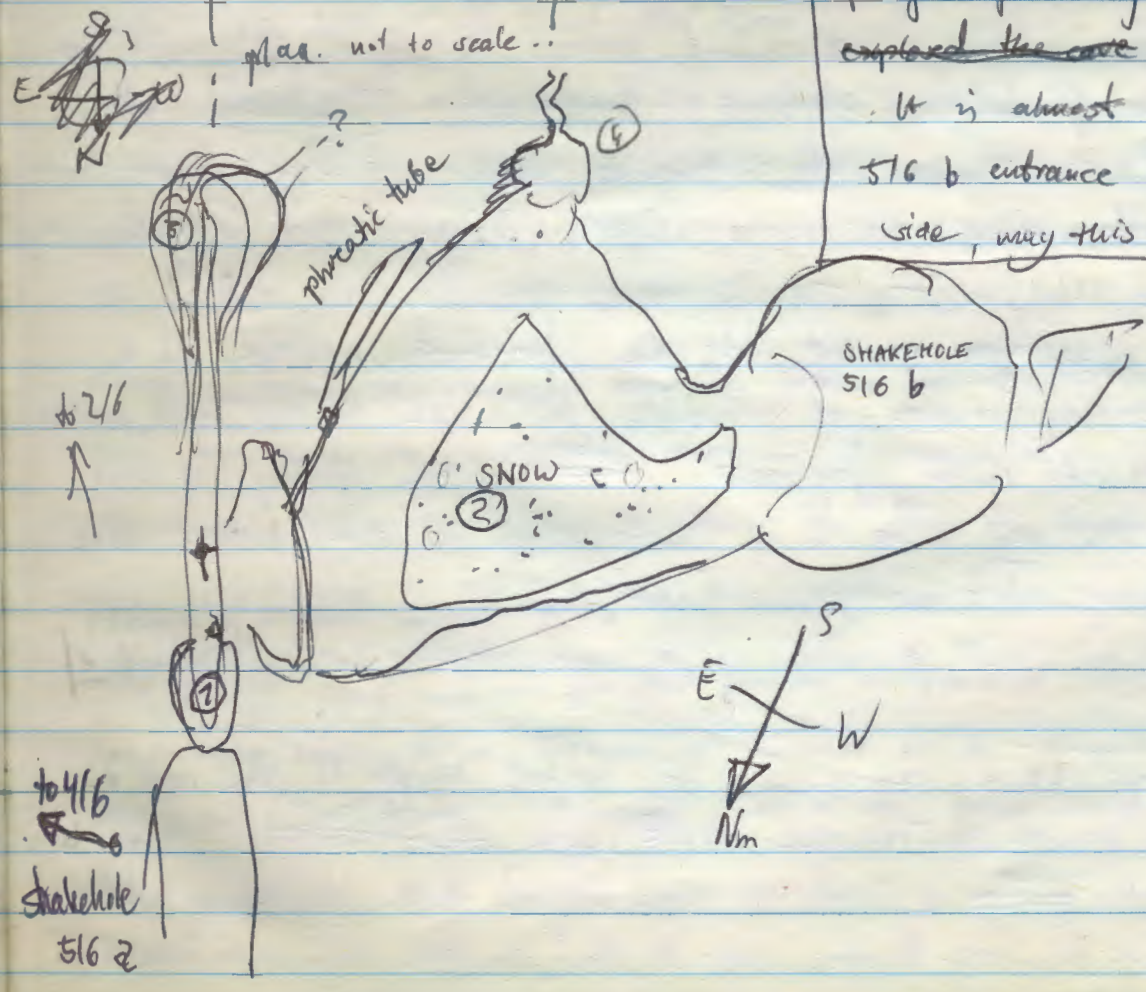
516 a & b (2-9-10 9.88)

E ← → W



N.B. 516 b Shakehole is definitely on the 'Polish' side of the ridge. We apologize for having discovered ~~it~~ ^{it from} explored the ~~cave~~ inside.

It is almost impossible to see 516 b entrance from anywhere outside, may this be our excuse



818/88: 516 - part of shakehole leads into a rift which goes north.

Entering it you come into a little chamber ①. About 1m higher than the floor of this chamber (mainly a big chocked boulder) one can climb further into the rift which then is just ~~wide~~ wide enough. Y-Belay installed about 1.5 m from the chamber.

918/88: Markus abseils from that belay. Finds that the rift/pitch becomes wider and that its bottom gets daylight from West.

Leaves the rope ≈ 10 m beneath the belay, climbs down some steps.

All probable ways into the mountain from the bottom are choked, but a big "door" leads to a dome ②, the roof of which is formed by a rock layer ^{bedding plane} at 45°; with snow on its floor.

At the far end the blue sky is seen through a big cave entrance and several small "windows".

The snow can be bypassed on the left hand side (at least this year!) still close to the bottom of the pitch a phreatic tube comes down into the dome, ~~and~~ a tube which follows the same 45° angle ~~at~~ as the dome roof. [It doesn't actually but it is developed along a bedding plane.]

In the left corner some steps down to another rift ③ which can't be crawled into since its average width is 3 inches. But it's draughting and there is an echo in it.

Be aware when you go out into the forecourt, i.e. the 516 b shakehole: its floor consists of unstable fist-size boulders and pebbles and these roll off under your feet. ~~So~~ ^{Next to} the opening of this shakehole to the sky there is a "window" on its ^{West} ~~west~~ side since there is still one more natural rock bridge.

This shakehole could be used as a cave entrance with the help of a ladder.

There might be a way on: At \approx half length of the rope in the rift it is possible to traverse above some ~~choked~~ ^{chockstones} material towards a chamber ④, the ~~floor~~ ^{floor} of which is a bit higher than the place where one would leave the free hanging rope. The chamber seems to lead to

another rift (direction S-W.)

27

28

10/8/88

5/6 yet again: Pozo Paseo Nevado (the snowy promenade)

The weather once more being too nasty to work with the thro' (gusts of force 8 just lift the tripod from its stand, not to mention the clouds spilling into the bowl time & again) G. embarks on a 4 hrs solo trip down the cave.

First looked at the short pitch (3) which was rigged from a chondstone (dispensing with the half-drilled bolt-hole) & ~~from~~ from the bottom is seen to be an easy free-climb (!) (follow the crack of the entrance rift).

Around the corner to the left there is an ascending rift passage nearly blocked by an enormous & several less enormous boulders, trending up towards 4/6 (but must still be below it). On the opposite side, the boulder floor of the pit emits a...

draught. Spent an hour digging there until I was approaching another phase of cards' situation.

Two or three large things would have to be shifted using a pulley system. My battery also went flat here - the pit is going to be called Las Pilas (can mean 'batteries' or 'piles' (of boulders)).

Returned to the main hang & had another look down at rift (4) another typical Picos canyon just a bit less than Graham-sized. This place doesn't yield its secrets easily. Looking at the floor I began to suspect that the gravel wasn't resting on a solid rock, but maybe on more chondstones. 90 minutes digging (following a top-down strategy) managed to lower the floor by nearly three feet (shovel & bucket might have been useful) at which point my suspicions were finally confirmed - the first pebbles disappeared downward through black holes, rattling for a couple of seconds or so. Then the unstable scree slope I'd been sitting on slumped a bit & the holes were no longer visible.

It is possible, with a lot of luck, to throw a pebble ahead in the existing rift so that it drops down to the same depth, rather than landing on one of the

24

10/8/88 Big clouds creep over the ridge between Redondo del C. and Conjurao, bringing with them cold air and wind. All the area beneath T.C. is covered with them, sometimes they reach around it and rise towards la Verdellanca ...

Markus, ^{although} willing to continue SL6, stays at T.C. because of ~~his~~ being ill ("Duo-difall", i.e. shits). Gerhard sets out for the last surveying, but it will take him long at these weather conditions!!!

In the evening Ewald & Kivi come up for a visit & to carry down some gear, & it clears up just long enough to finish the triangulations.

* A narrow pitch is not a loo, after all !!!

→ the numerous ledges or chodestones. — The place wants a determined dig & a proper survey (a very detailed one so that you know which end goes where — sorry I couldn't do this on my own). I've a pretty good notion of where it's going to emerge, probably parallel to Prime Time in 2/6 (the that pitch would have to be called 'Dancing on a High Wire' for reasons obvious to anyone who knows Ammonia Avenue by APP).

The cave is in the beautiful, bluish-grey, fossiliferous (!!!) limestone of the upper member of the Picos formation, the entrance pitch (Vista Sorpresa) is in a spotlessly clean-washed off — what an enjoyable place, compared to the Barcaliente stuff on the other side of the thrust ...

29
30
- total depth ~ 15m plus

- tackle: lower entrance - ^{S/66} free-climb through cyclole (loose boulders abound, beware!) or ladder & long wire from large boulder.

• Upper entrance S/6a: 25m rope as handline from flake at rim of doline (tape), then main hang from flake in rift (tape) as backup & Y-hang from 2 bolts, P10 to chamber at bottom.

Alternative: pendule forward in rift after having descended 6m & walk ahead on chockstones carrying the end of the rope along until rift meets cross-rift & opens to a shaft. Las Pitas (P5) is rigged from a chockstone opposite (wire & tape) or free-climbed tugging the crack underneath your feet.

Markus & Gerhard. complete a carry down/up (with lunch at the Puente Romano) well after midnight. Markus isn't feeling too well. 11/8/88

Late start... Markus & Gerhard carry down again, with two LARGE rubbish bags in their hands. In the evening G. returns with William & Ewald for a three courses dinner involving mejillones, olives, 'stuffed burst peppers' & chocolate. 12/8/88

Gerhard, having accompanied Markus to Cangas, returns yet again 13/8/88 with the small theodolite since the fair weather just permits tying up a loose end ~~of~~ from the '86 triangulations. Takes down everything and his tent (into which the sheep have torn a hole more than a foot long) as far as the Refugio in the evening. Still two flagpoles in place (on Verdelluenga & Conjurtao); the Poles will look after those on Traviesas de Jorcada.

(27) Another entrance I forgot to log the day I looked at it — in fact I'd noticed it as early as '85.

— Location: From the lowest Peridices entrance (F7A), go slightly down & contour left (W) until you encounter deep holes in the floor (not far, ~40 metres), then go down the rim of an obvious large elongated shakelike which can be entered by climbing down at various points but easiest at the bottom end. Walking back along the floor ^{of the sh/b} (while outside the slope rises) you end up looking past a huge boulder into a snow-floored chamber, with light streaming down three or four holes in the roof and with a chill draught emerging.

— description, as far as looked at:

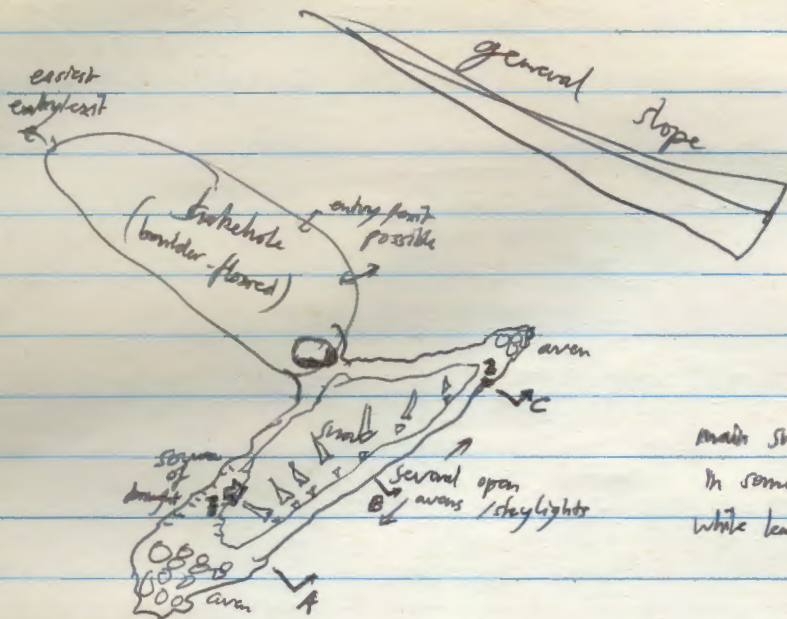
(Don't follow this without protection!)

Squeeze past the above-mentioned boulder on its righthand side until you stand on the snowplug. This must have been resting on ~12 feet of thin air. This year so for God's sake take care.

Walking left, a slot is seen on the far wall down which pebbles drop to land on a second snowplug stem down. Walking right from the point of entry, you are facing the draught emerging from a similar but wider slot which I didn't dare approaching without a line. This might be a short cut to the F20 campsite.

There's no paint left at Top so I couldn't mark it. It's quite unmistakable though.

plan sketch 5



→ to F7A

main snowing touches walls
in some places (not drawn)
while leaving a gap in others.

Sections:

