YEW TEA GEE
NOOZ
THE EXPERIENCED CAVER LEARNS TO IMPROVISE IN THE FIELD...
ACAPULCO GOLDLINE
DOO DAH
'AY 'N 'AYE
YEW TEA GEE
KRISTOFFERSON

[April 1977]

UTG NEWS

VOL. 8, NO. 2
April 1, 1977

CONTENTS

The First Descent of Sótano de las Golondrinas 3
Map of Sótano de las Golondrinas 5
Rock Drop Chart 6
The Forbidden Land... Return to Huautla 7
The Long Caves of Mexico 11
Grotto Scores New Rope 12
Cyalume Lightsticks 15
Trip Reports 17
Survey Cueva los Hundidos 21
The Chuckwagon, Reincarnated 25

The UTG NEWS is published by the University Speleological Society, a grotto of the National Speleological Society. Opinions expressed here-
in in no way reflect those of the University, the NSS, or any other group.

The University Speleological Society has regular meetings on the first and third Wednesdays of each month at 7:30 PM in Experimental Science RM 115.

EDITORIAL STAFF: David Honea, Janet Honea, Peter Sprouse, Terri Treacy.
PRODUCTION STAFF: Jerry Atkinson, Janet Honea, Peter Sprouse, Terri Treacy. COVER ART: Norm Kristofferson.

OFFICERS

Faculty Sponsor	Dr. Victor Baker	GEO. BLDG. RM 215A
President	Terry Sayther	442-1361
Vice-President	Jerry Atkinson	476-5742
Equipment Chairman	David Honea	453-4774
Expedition Chairman	Bill Stone	
Secretary	Peter Sprouse	478-7045
Treasurer	Janet Honea	453-4774
Librarian	Tom Byrd	478-1737

DUES PAID MEMBERS

Gerald L. Atkinson	David Honea	Gil Pena
Sheila Balsdon	Janet Honea	Ron Ralph
Ruth Barksdale	Roy Jameson	Martin Ratliff
Frank Binnev	Jerry Johnson	Wayne Roberson
Nancy Boice	Kleyton Jones	Nancy Sayther
Don Broussard	Ernst Kastning	Terry Sayther
Tom Byrd	Steve Knutson	Alan Secrest
Maureen Cavanaugh	Shari Larason	James Solimine
John Delano	Dino Lowery	Peter Sprouse
Jill Dorman	Pam Lynn	Bill Steele
Randy Farr	Thomas Martin, Jr.	Bill Stone
Preston Forsythe	Mike McEachern	Peter Strickland
Andy Grubbs	Mike McKee	Terri Treacy
Blake Harrison	Logan McNatt	Steve Zeman

April 1, 1977 marks the 10th anniversary of the first descent into the Sotano de las Golondrinas, Aquismon, San Luis Potosi, Mexico. On April 1, 1967, T.R. Evans was the first person to rappel into Sótano de las Golondrinas and set foot on the bottom of the world's most spectacular free fall pit. The members of the University of Texas Grotto and the members of the Association for Mexican Cave Studies would like to take this opportunity to both recognize the many hours of effort that T.R. Evans has done in Mexican caving, and to express our gratitude to T.R. for his instrumental part in making Mexican caving what it is today.

The discovery and descent of Sotano de las Golondrinas meant much more than breaking the depth record for a free fall pit at that time. It marked the emergence into the world scene of the Austin caving community. Golondrinas still has the longest known free drop; but more importantly, its overwhelming impact makes it the focal point for deep pit caving in Mexico.

Now, looking back ten years, it seems clear that the strides made in caving in the last decade have been due in large part to the quality and strength of the foundations laid down by T. R. Evans and the many others who created the AMCS. The integrity of their speleology and publications, the exuberance of their caving, and their constant vigilance for safety should be a guiding force and inspiration for the future.

On the eve of another promising decade, it is hoped that all cavers will strengthen their mutual bonds and realize their common goals. Much of the world looks to Austin for the standard by which to measure its progress in caving. We must reflect that trust in the quality and integrity of the work that is done.

The Editors

THE FIRST DESCENT OF SOTANO DE LAS GOLONDRINAS

by Bill Deane

In December, 1966, T. R. Evans, Randy Sterns and Charles Borland hiked up into the mountains west of the small town of Aquismon in Mexico to investigate the area for its caving potential. They followed a well traveled mule trail leading to the town of Tamapatz, While on the way Indians told them of a deep pit with many birds living in it. It was called the Sotano de las Golondrinas.

Arriving at the awesome entrance, the three cavers were stunned when they found that a rock dropped into the pit took more than ten seconds to reach bottom. This indicated a depth of over 800 feet. The pit was not entered at this time due to the lack of a long enough rope.

The morning of March 31, 1967 found twelve of us arriving in Aquismon. Squire Lewis and Nancy Walters had come down from Pennsylvania and had given me a ride from Austin, T. R. Evans, Jon Morse, Sid West and Bob Hugill had come from Maryland, Bill Cuddington, John and Sandy Cole and Dan Hale had come from Alabama. Sandino Techo, a friend of the Coles, had come up from Xilitla, Mexico.

Soon we were packed and began the hike. It is only 15 kilometers from Aquismon to the Sotano. However, we found the going to be slow due to the heat. That evening the twelve of us gathered together at the edge of the Sotano. Words cannot fully describe the impressive entrance. It is an immense hole descending into nothingness surrounded by jungle.

Squire took out his railroad watch and began timing the large rocks we were dropping into the pit. It was amazing to watch them fall and fall and fall. Then you would hear a distant boom as they hit bottom and Squire would announce "11-1/2 seconds." This was rather amusing since T.R. had told us it was a 10-second drop. This extra 1-1/2 seconds meant that the pit was 200 to 300 feet deeper than the 800 feet we had expected.

Arising early the next morning we began our preparations for the descent. Our main task was to rig the rope into the pit. Bill Cuddington had brought his 1180-foot section of one-half inch dimeter Samson, 2 in 1, Nylon Braid Rope. Braided, the rope was about 40 feet long and 7 inches in diameter. It looked like a giant white python. We carefully unbraided it and laid it around the edge of the pit and secured the other end to a 70 foot rope wrapped twice around a limestone outcropping. The operation required most of the morning to do. We could see that the rope touched bottom. We knew that 116.5 feet of rope was

actually hanging in the pit.

Since it was the efforts of T. R. that led to the discovery, he had the honor of being the first down. T.R. put on his rappelling equipment and sat by the edge. Bill and John pulled up several feet of rope to create slack so he could rig on and ease over the edge. Great care was needed since the weight of the rope, 65 pounds, made it very awkward to handle. Once over the edge, T.R. arranged his pack and began the rappel. He carried one of the walkie-talkies with him, but we had agreed beforehand that except for emergencies there would be no radio contact until he was on bottom. About 20 feet down he pushed aside a small tree limb. This was the last thing he was to touch besides the rope for the rest of the rappel. From there on the walls continually recede away as you go down. When you land on bottom, the nearest wall is 200 feet away.

Our proceedings had been watched very quietly by about 20 Indians. The Sotano had been a common feature of their lives and I doubt if they had ever considered that someday someone would go down it.

The minutes passed slowly. kept myself busy photographing the descent. It was fantastic watching T.R. disappear into the blackness below. Finally after 30 minutes we could see that he had reached bottom. A few more minutes passed while he derigged. Then came the radio call we were waiting for. A very astonished T. R. informed us? "You won't believe the size of this place!" After giving us a brief description of the bottom he began walking around looking for leads.

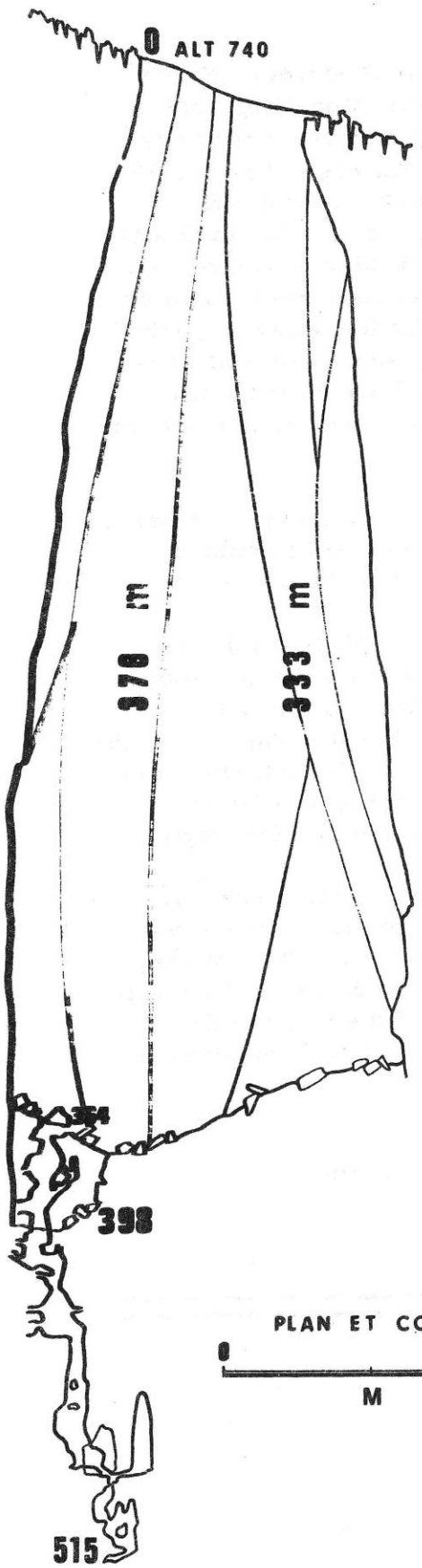
In June, a second AMCS team conducted the plane table survey. They found that the minimum possible drop happened to be where we had rigged the second rope and was 1094 feet. It was a 1098 foot drop where we had rigged the first rope. This broke, by 64 feet, the existing world's record held by the Lepineux entrance of the Gouffre de la Pierre St. Martin in France. Mexico had produced her first world's record.

Excerpted from NSS NEWS, Vol. 26, No. 3, March, 1968.

SOTANO DE LAS GOLONDRINAS

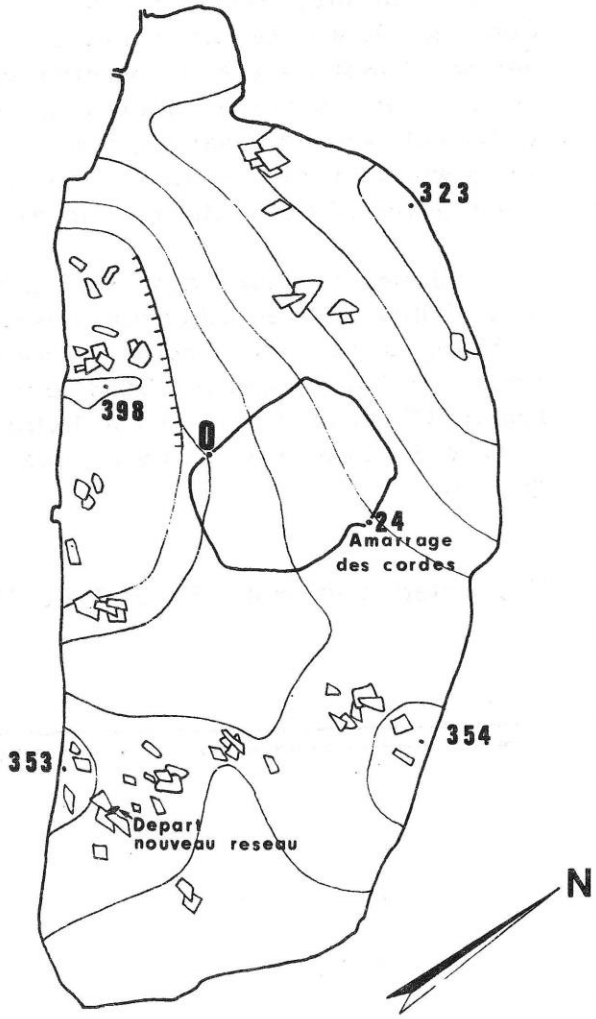
S.L.Potosi – Mexique

From Atlas Des Grands Gouffres Du Monde
by Paul Courbon

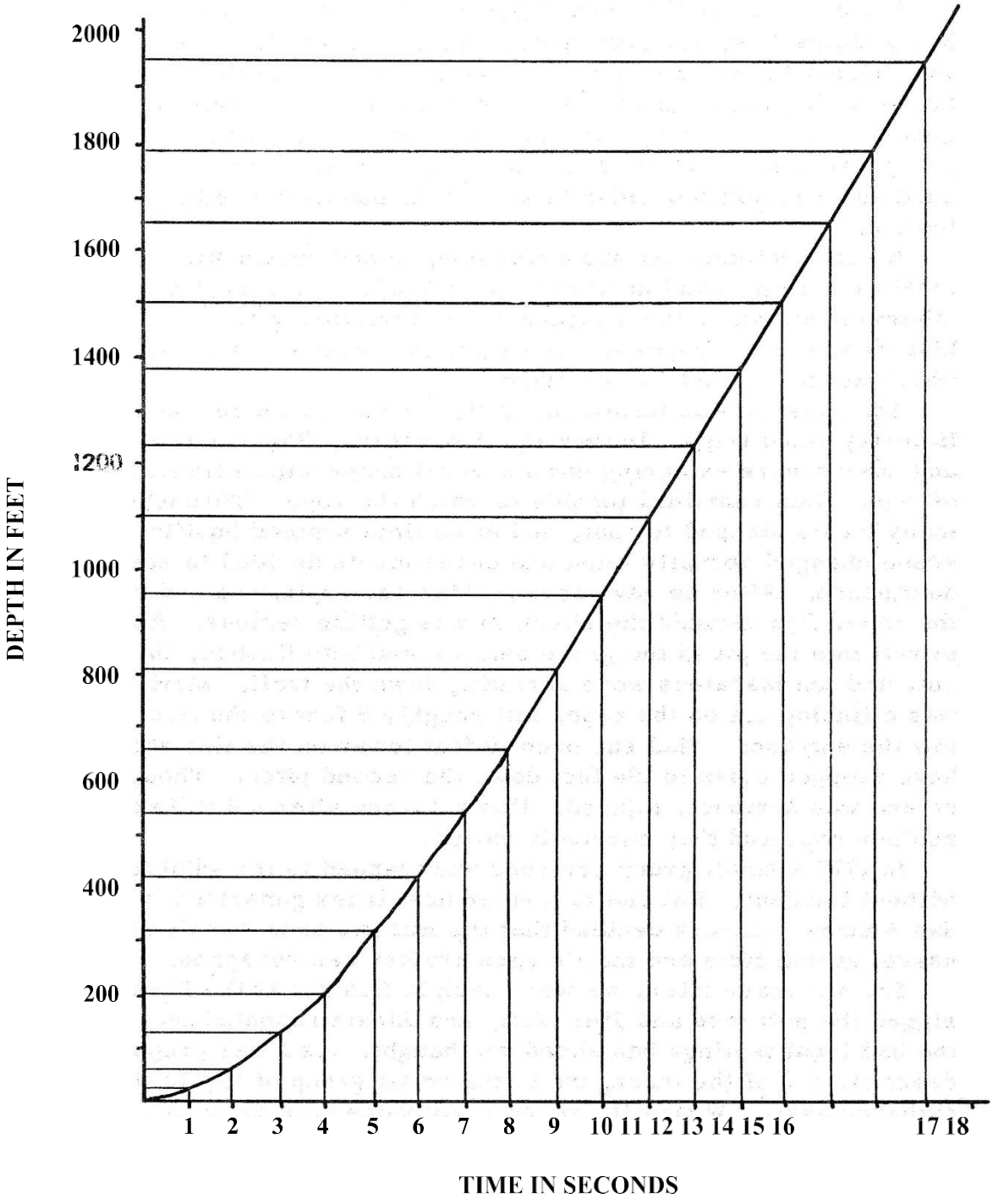


PLAN ET COUPE

0 100
M



Rock Dropping Times for Free-Fall Pits



Note: this graph was plotted using data on rectangular rocks roughly 4 inches in diameter. The biggest error in determining depths is likely to be the human error in timing, so take an average of several different attempts.
From: UTG Newsletter, Vol. 4, No. 1, data by John Fish.

THE FORBIDDEN LAND....RETURN TO HUAUTLA

by Bill Stone

In December of '76, Frank Binney, Jeff Horowitz, Roy Jameson, Patty Mothes, Alexia Cochrane, and I left Austin for Huautla to connect with Richard Schreiber's crew in pushing Sotano de San Agustin. Schreiber's group had arrived a week before in San Agustin, promptly rented a house, surveyed to the -648m point in the cave, left a major going lead and were preparing to split when we arrived Don Broussard and Jim Smith decided to join our group as Schreiber's crew pulled out.

We immediately set about warming up and acclimatizing in some smaller area pits and decided to push Don's infamous 'La Grieta', otherwise known as the 'Fissure.' A description of the cave's notorious history would be proper for providing the correct setting for that which we were about to experience.

The Fissure was located by T.R. Evans in 1965 on one of his preliminary scout trips. In 1969 Don Broussard, David Honea, Meri Fish, and others were exploring down several drops with a limited amount of rope. Don remained topside to watch the rope. Throughout the day many locals stopped to chat, and at no time seemed hostile. The whole scene changed abruptly when, one of the locals decided to assert his dominance. After he gave several Mazatec expletives and pointed to the rope, Don decided the situation was getting serious. As he turned to yell into the pit to the group below a machete flashed, the rope was cut, and ten Mazatecs were sprinting down the trail. Meri Fish, who was climbing out on the rope, fell roughly 5 feet to the first ledge below the entrance. Had she been 10 feet lower on the line she would have dropped close to 100 feet down the second pitch. Though shaken no one was seriously injured. Don returned after a 4 mile dash for another rope and they hurriedly exited.

In 1970 a small group returned and mapped to the -400 foot without incident. But due to further hostilities generated from near San Andres, cavers decided that the Huautla area wasn't worth the hassle at that time and the Fissure project was scrapped.

So, six years later, we were back in Huautla at the Fissure. We rigged the entrance and Jim, Jeff, and Alexia rappelled in. Surely, the bad local feelings had ebbed we thought. As I was preparing to descend, one of the teenagers in the small group of locals that had gathered asked "What will you do if someone cuts the rope?" That was all I needed to be convinced we needed a guard. While the others rigged in I stayed and chatted with the friendly local that happened by. All seemed well.

About mid-afternoon two husky Mazatecs came down the trail with loaded burros. They immediately stopped, stood up belligerently, and said, "What do you think you are doing there?". I gave them my

standard AMCS introductory speech. They replied, "Where is your permission?" Since we had only verbal permission from the Presidente of Huautla and had left the consulate papers in San Agustin, I was at a loss to present them with anything. They promptly demanded 50 pesos, which is a lot of dinero to produce pitside. Naturally, I had nothing to give them and said so. I was immediately informed that they were going to cut the rope.

Well, I couldn't begin to write down the rash of thoughts going through my head at that moment. Neither of the culprits stood taller than my chest and couldn't have weighed more than 110 lb. each. I convinced myself that both could be flipped into the cornfield if anything was seriously threatened. Nonetheless, that was to be a last resort as 20 peasants were watching from the far trail. In the meantime one of the two was scrambling to untie or cut the rope, while the other was attempting to throw a noose over my head or whip me with his short rope.

About this time they threw my pack into the pit. Visualizing my last Justrite lamp smashed to bits was the last straw. Apparently realizing this, they snatched a 10m rope and ran like hell. I chased them 30 meters and gave up. Through all this the rope didn't get cut or thrown in.

Had our problems ended then it would have made an interesting campfire story. Two hours later, four somewhat smaller Mazatecs arrived and said the Presidente wanted to see me immediately. They didn't seem too hostile and I convinced them to wait an hour. Finally I heard Jim's voice below. All were up shortly and we had a quick conference. It was decided that Jim and Jeff would take all the gear and entrance rope and head for the house with instructions to contact the Huautla police if Alexia and I weren't back by morning. Alexia and I then hiked to Plan Carlota, arriving in the courtyard as darkness fell. One man produced a set of keys and unlocked a small door. Alexia looked at me and we both decided we weren't going in there until the Presidente had entered.

Shortly the political entourage came and all entered the small room whereupon a candle was lit and the kangaroo court convened. An old man read an official letter stating that all hippies in the region, especially those possessing such "cosas ilictas" as marijuana and hongas (psilocybin) were to be hassled and could be fined up to 1000 pesos and imprisoned. They then demanded 500 pesos! The situation was serious as they spoke very little Spanish but were making the case clear that if we had nothing of value we would spend some time getting acquainted with their jail. They even went as far as to suggest Alexia provide some "services" for the Presidente. We stated our case for about an hour and for some reason (Christmas Eve, Belief, Boredom??) they let us go after we promised to return the next day and pay the 500 pesos. We hiked back to the house and a heavy conference ensued. There was too much equipment to abandon the Fissure, as it was left

rigged, so it was decided to pull a political power play.

The next morning Francisco "Kissinger" (alias Frank Binney), met with the Presidente of Huautla armed with a leisure suit, a briefcase, and 2 copies of Inside Earth. Four letters were procured, addressed to the towns surrounding San Agustin. The letter to the "agente" of Plan Carlota was direct and explicit: These scientific technicians are not to be hassled and it is your responsibility to see that their work continues with no further obstruction. Frank and I hiked out to Plan Carlota where the edict was read aloud both in Spanish and Mazatec. The liaison apologized for the hassle and the rope rip-off and said we were free to visit the cave. No money was exchanged, although we did give the Presidente a bottle of brandy.

In much higher spirits we returned to San Agustin thinking that the matter had been settled. The Fissure was entered and pushed to -420m and still going. Activity was then switched to Sotano de San Agustin, leaving Roy, Patty, and Jeff to return to the Fissure to finish the survey and left no guard at the entrance save the bolt with chock back- up we had set 3 m below the lip. The first person up the drop was very consternated to find the rope cut just above the bolt, while in the cave, and the chock missing too! The locals were plainly not to be trusted. (Between skirmishes we did manage to push San Agustin to -2625 ft)

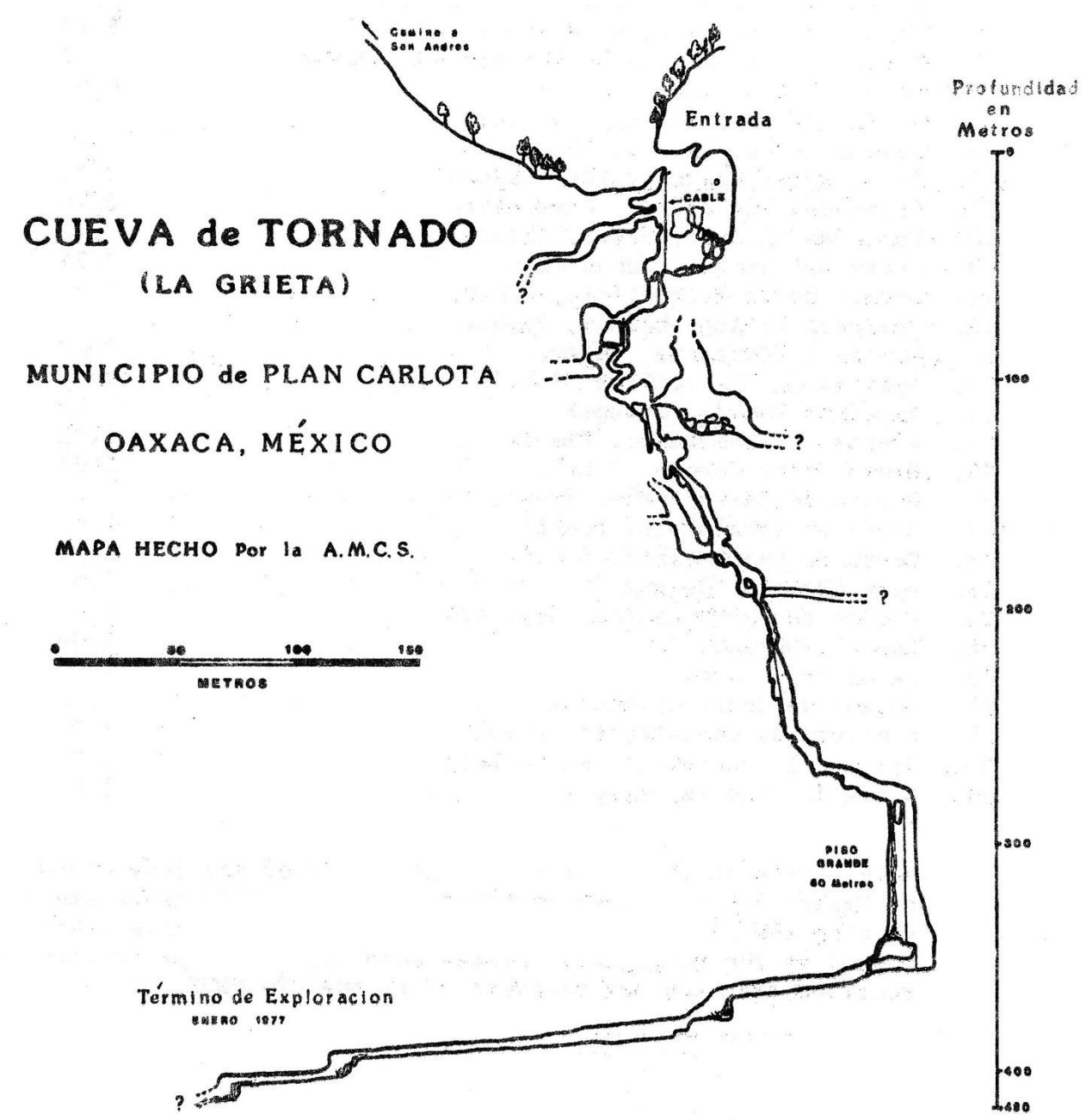
To those unfamiliar with the Huautla region before reading this article, I believe it only fair to present a view from the other side of the fence. The Mazatecs have traditionally been one of the most isolationist oriented groups of the post Mayan-Aztec people. The building of the road to Huautla by the Mexican Government threatened their isolation causing severe resentment towards outsiders. However, the communities within a reasonable distance of the roads soon learned Spanish and their children went to Mexican schools. Hostilities to outsiders eventually diminished in these areas. Unfortunately new ideas spread at a considerably slower pace in areas not in close proximity to the roads and resentment remains high. The Fissure lies some 2km from the main road in just such an area.

Traditional Indian religion in the Sierra Mazateca applied great significance to caves. They were the portals to the underworld. Accordingly, a man would want to enter a cave for one of two reasons: 1) to commune with the devil or 2) to search for his soul which he had lost in some unfortunate manner.

With this perspective, one might imagine the Mazatec reaction when Huautla became the mushroom capital of the world. Every true hippie within 10, 000 miles came to Huautla between 1965-70 before the federales stopped them by roadblocks at Teotitlan del Camino. Visualize an Indian watching a spaced out hippie eatinga live turkey in the town square, as occurred in 1964, and you might understand their further intolerance of gringos. Much of the problem which still plagues cavers in this area were brought about by the Hippie Era. Unfortunately, it was about this time that Russell, Evans, Fish, and other cavers

were discovering Huautla.

It is a growing realization that the region is far from finished and that we are faced with the monumental task of reconstructing public relations. The question most often asked of our expedition Christmas was "Why do you do it?" In answer we printed up 150 four page PR sheets in Spanish with maps and pictures. We explained the purpose of the AMCS in Huautla. In addition the March expedition has the proper credentials and the outward appearance of a serious exploration team. Anything less would negate whatever progress we made last Christmas.



THE LONG CAVES OF MEXICO

Compiled by Peter S. Sprouse and William H. Russell

		length in km.
1	Sotano del Arroyo, S.L.P.	7.20
2	Cueva de Kaua, Yucatan	6.70
3	Grutas del Rio Chontacoatlan,Guerrero	5.60
4	Grutas del Rio San Jeronimo,Guerrero	5.60
5	Grutas de Juxtlahuaca, Guerrero	5.10
6	Cueva del Nacimiento de San Antonio, Oaxaca	4.57
7	Sotano de la Tinaja, S.L.P.	4.50
8	Sotano del Rio Iglesia, Oaxaca	3.80
9	Sotano de San Agustin, Oaxaca	3.66
10	Cueva de la Laguna Verde, Oaxaca	3.35
11	Cueva del Rio Jalpan, Queretaro	2.44
12	Cueva de El Chorreadero, Chiapas	3.28
13	Cueva del Brinco, Tamaulipas	3.24
14	Sotano de Huitzmolotitla, S.L.P.	2.90
15	Sumidero de Atepohuilit, Puebla	2.10
16	Grutas de Estrella, Mexico	2.10
17	Sistema de Montecillos, S.L.P.	2.00
18	Sumidero Yochib, Chiapas	1.99
19	Grutas de Tenextepec, Puebla	1.92
20	Cueva de la Puente, S.L.P.	1.83
21	Grutas de Balankanche, Yucatan	1.60
22	Cueva de Tasalolpan, Puebla	1.60
23	Cueva de Los Sabinos, S.L.P.	1.50
24	Agua Carlota, Oaxaca	1.40
25	Grutas de Cacahuamilpa, Guerrero	1.38
26	Cochll, Chiapas	1.36
27	La Grieta, Oaxaca	1.30
28	Sotano de Sauz, Chihuahua	1.23
29	Sumidero de Cohuatichan, Puebla	1.20
30	Gruta del Precipicio, Nuevo Leon	1.09
31	Cueva de Culebra, Oaxaca	1.00

NOTE: This is the first time that a list of the long caves of Mexico has ever been compiled, therefore many caves are missing that information was not available on or were overlooked by the compilers. Please send any additions or corrections that you may be aware of to the UTG NEWS.

Grotto scores new rope

By David Honea

After a survey of the membership it became clear that there was no confidence in the reliability of the UTC stock of club goldline, In addition, although the ropes demonstrated a recognizable gradation in visible wear, no history for any given rope could be produced. Therefore, it was impossible to determine if any rope had been subjected to a fall, excessive wear or to chemical deteriants. During the first Executive Council meeting of 1977, these points were discussed at length. It was decided that all the club goldline would be condemned and removed from club use. New goldline was to be bought as soon as funds could be raised for the order.

Several avenues existed to raise money for the rope order. The club treasury contained a sizable sum. Since there is a heavy bias in the club towards vertical caving it seemed reasonable that Interested parties could directly subsidize the rope purchase. The salvage value of the condemned rope could be added to the fund by selling the old rope as work. Contributions were taken by the treasurer totaling $237. Old goldline rope was divided into two grades according to visible wear, and sold for , or $.10 per foot. The total salvage value retrieved was $137.00.

An order was sent to Bob & Bob for two spools of 1200 feet, at .19 per foot. The total price, including shipping% was This entailed the expenditure of $111.00 of club funds, in addition to the $374.00 obtained from the sale of old rope and from contributions. The two spools were received in Austin on March 3, 1977.

With 2400 feet of new rope in hand, the question is: Into what lengths should it be cut? In order to answer this question in an unbiased manner, two graphs were prepared. In the first, fifteen major Mexican pit systems were examined, and the drops and drop depths were tallied. This is Graph A. Each channel of the graph represents the total length of drops encountered of that length, including five meters for tie off. In Graph B, the old UTG goldline rope lengths are plotted. Each channel represents the total length of rope cut at that length. Upon of these two graphs, one finds very close agreement between the drops encountered and the cut lengths of the rope. This agreement is both in the general shape of the curves and, also, in the lengths per channel. One finds 59.3% of the drops between 15 and 50 meters, versus 58.5% of the rope length between 15 and 50 meters. With this information a possible rope cutting scheme can be prepared.

Peaks occur in both graphs In the area between 15 and 40 meters. at 65 to 70 meters, and at 100 meters. Several large spikes can be seen on Graph B at 25 and 35 meters, These are easily explained by realizing that a 25 meter rope can be efficiently used for 20 meters: and a 35 meter rope can be used for 30 meters. Considering the fact that all of the ropes are being replaced, there is no necessity in reflecting these spikes in the cutting lengths, a somewhat smoother curve, more closely following the drop curve, is perhaps more appropriate. This allows a closer match of rope to drop, and lessens the likelihood

of cutting the rope while caving, With this in mind, the following cutting scheme is suggested:

2 @ 20 M
3 @ 30 M
3 @ 35 m
3 @ 40 m
2 @ 50 m ---62% of the total
1 @ 75 m
1 @ 80 m
1 @ 120m

This scheme reflects the general peaks around 35, 65, and 100 meters. It, also, carries a similar weighting of lengths between 15 and 50 meters of 62%, compared to 59% in the drop lengths, The ropes will be taped and fused after being cut. As yet, the tagging system is undecided.

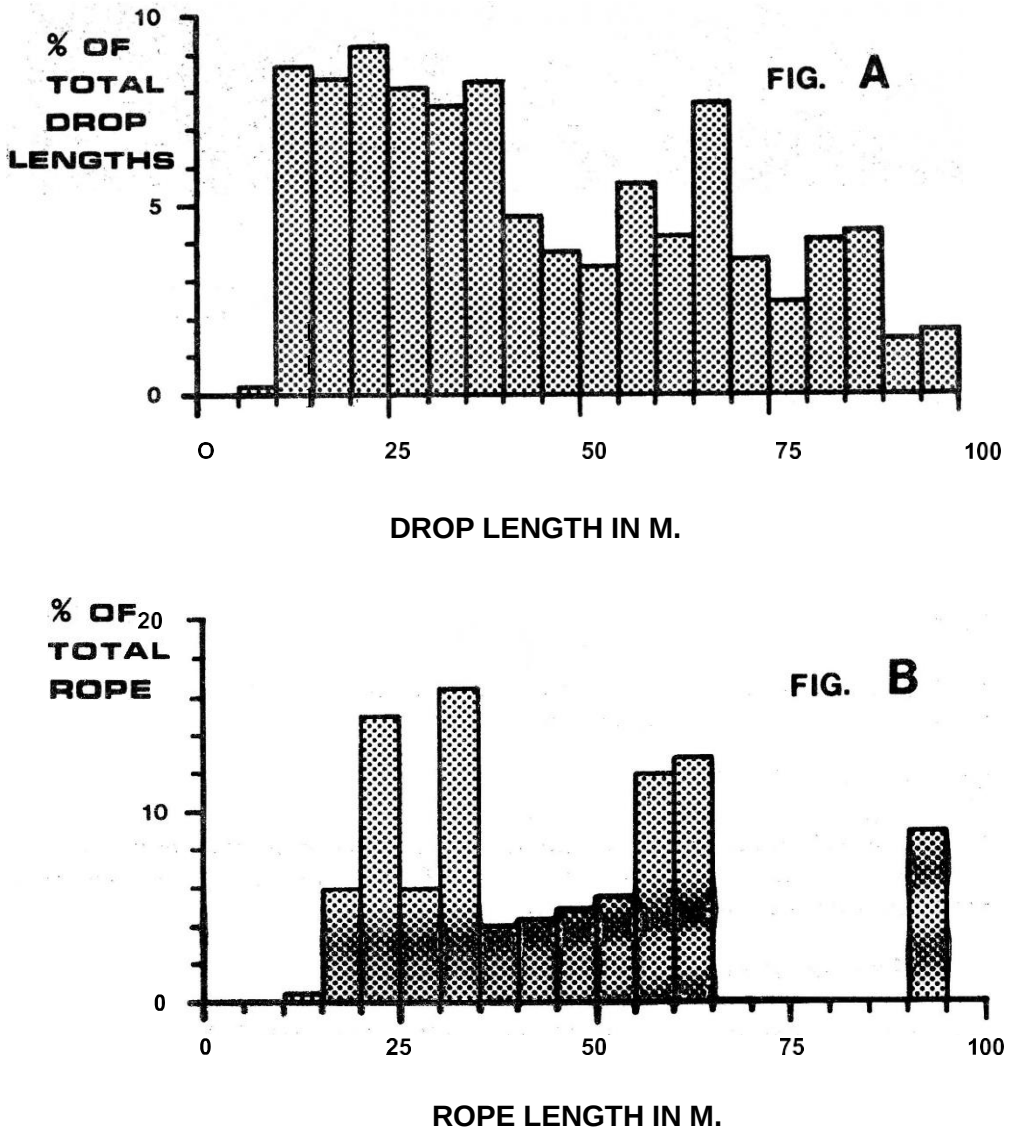
A number of rope samples were retained for future testing. Several interesting questions could be investigated with the wide range in condition of the samples available. For instance, a comparison can be made between actual breaking strength and visible wear. This would allow future evaluation of the condition of a given rope at any time. A correlation can be attempted between external versus internal wear, fiber lengths, and breaking strength versus undamaged fibers remaining.

Rope Donors

The following people donated $10.00 or more to the purchase of the new Goldline. The University Speleological Society thanks you for your generosity.

Nancy Boice
Shield Balsdon
Don Broussard
Jill Dorman
Preston Forsythe
David Honea
Janet Honea
Robert Hemperly
Roy Jameson
Shari Larason
Dino Lowery
Mike McEachern
Mike McKee
Ron Ralph*
Wayne Roberson
William Russell
Rene Shields
Peter Sprouse
Bill Stone
Peter Strickland*
Terri Treacv
Steve Zeman

JOIN THE NSS



Histograms comparing Mexican pit systems and rope lengths of the University Speleological Society ropes.

A. Percentage of drop length versus drop length for 15 major Mexican pit Systems. Total depth -5845 meters (included 5 m per drop for rigging).

B. Percentage of rope length versus rope length for UTG ropes available March, 1977. Total length 976 meters.

Systems tallied: Buque, Conchas, Diamante, El Sotanito, Grieta, Itamo, Javalin, Joya de Salas, Monos, Nogal, Rio Iglesia, San Agustin, Tlamaya, Zimapan.

Percentage of drops between 15 & 40 meters --- 50.6%

Percentage of ropes between 15 & 40 meters --- 49.0&

CYALUME® LIGHTSTICKS

QUESTIONS AND ANSWERS

1. WHAT MAKES IT WORK?

The light emission is provided by a chemical reaction which takes place when the two solutions are allowed to mix. To prevent the reaction from taking place prematurely, one of the solutions is stored in a very thin glass ampule which is easily broken by flexing the plastic wand.

2. IS IT SAFE?

The CYALUME® lightstick is safe for normal use—it is not a source of heat or sparks and may be used in areas which contain combustible mixtures of gases.

3. HOW DO YOU TURN IT OFF?

The CYALUME lightstick cannot be shut off; however, the chemical reaction responsible for the light emission may be slowed by placing the lightstick in a freezer. Removal from the freezer and warming to room temperature will permit the light emission to continue.

4. WHAT COLORS ARE AVAILABLE?

At present, there is only one commercially available color—a yellowish green. It should be noted that the dark adapted eye is the most sensitive to this color, thus making the CYALUME lightstick exceptionally suitable for use as a nighttime marker.

5. HOW LONG DOES IT LAST?

The general purpose CYALUME lightstick will provide useful working light for approximately three hours **and** can be used as an identifying marker for -an additional eight-ten hours.

The 30 minute Hi-intensity lightstick only lasts for 30 minutes.

6. HOW LONG CAN I KEEP IT?

Quality control studies have shown that if the outer wrapper has not become damaged, the CYALUME lightstick should have a shelf-life of not less than two years.

7. WHAT HAPPENS IF THE LIGHTSTICK IS ACCIDENTALLY RUPTURED?

The solutions are non-toxic and no special measures are needed in the case of contact with the skin or eyes. Should an accident occur, merely rinse well with water the area contacted such as skin or eyes.

The solutions in the CYALUME lightstick will stain clothing and soften or mar paint and varnish.

8. IS IT WATERPROOF?

The CYALUME lightstick is completely waterproof and may be used in the rain as well as underwater.

9. WHAT SIZES AND CONFIGURATIONS ARE AVAILABLE?

At present, there is available only, the six-inch general purpose lightstick and the 30 minute Hi-intensity lightstick. Product development has resulted in several prototype lightsticks for specialty end usage—the emergency escape slide light for aircraft, the life vest lightstick and the baton lightstick. Obviously, there are a multitude of applications for chemical light, and the product development of this new form of light is still in its infancy.

10. WILL IT BE AFFECTED BY TEMPERATURE?

The CYALUME lightstick gives maximum light emission when used at temperatures ranging from 70-80° F. If the temperature is higher than 80° F, the light will be brighter, but for a shorter duration. If the temperature is lower than 70°, the light will be less bright, but will last longer.

11. CAN I REMOVE THE FOIL?

Due to the sensitivity to humidity, the CYALUME lightstick is wrapped in the airtight outer foil wrapper. Should the wrapper be punctured, and the lightstick not used within a few days, the light emission will be reduced. If the lightstick is left in the damaged wrapper for a longer period of time, it is possible for it to be totally deactivated. DO NOT REMOVE WRAPPER UNTIL READY TO USE.

12. HOW DOES IT COMPARE WITH OTHER LIGHT SOURCES?

When compared with a candle, CYALUME lightsticks are not a source of ignition, are readily activated without matches, won't blow out, won't drip, will work in the rain and **PRODUCE A GREATER VOLUME** OF LIGHT. When compared with a flashlight, CYALUME lightsticks weigh less, are easier to store and carry, provide better area light, will **not corrode, will not break, work underwater and are not a source of** ignition.

13. WHAT ARE SOME OF ITS USES?

CYALUME lightsticks may be used in any emergency situation, whether auto or home. Campers find the CYALUME lightstick excellent for marking of night trails and tents as well as a good source of tent lighting. Recreational uses of the CYALUME lightstick are limitless. Industrial applications of the CYALUME lightstick include aircraft emergency slide lighting, use on life vests and in nighttime rescue operations.

14. WHO HAS ACCEPTED OR APPROVED ITS USE?

1. **The U.S. Bureau of Mines — Accepted for use in underground coal mining, January 8, 1973.**
2. **Federal Aviation Admimst rath© (FAA>—STC. No. SA2728WE approved CYALUME chemical light (HI-LITE System—for use in emergency slide lighting as exterior emergency exit lighting in compliance with FAR 25.812 (REF: FAR 121.310.) Note that the approved stick is somewhat larger and has a different configuration. (HI-LITE Systems manufactured by Holcombe Industries, Redwood, California.)**
3. U.S. Navy — Approved for nighttime replenishment at sea operations (line and cargo markers.) Federal Stock Number 6260-00-106-7478. (4" lightstick.)
4. General Services Administration — Approved in Contract No. GS-00504380.

15. HOW DO I DISPOSE OF IT?

Please dispose of the used CYALUME lightstick and its wrapper in proper trash receptacles.

16. ARE CYALUME LIGHTSTICK CHEMICALS AVAILABLE IN BULK?

No, CYALUME chemicals are only available in lightsticks and are not available in bulk.

IMPORTANT NOTICE
The information and statements herein are believed to be reliable but are not to be construed as a warranty or respresentation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.
Nothing herein is to be taken as permission, inducement or recommendation to practice any patented invention without a license.

7-2330-J0M-I/77 Printed in U.S.A.

TRIP REPORTS

Destination: Cueva del Brinco, Tamaulipas
Date: March 11-20 [1977]
Persons: Jerry Atkinson, Sheila Balsdon, Gill Ediger, Robert Hemperly, Katy Knighton, Thomas Moore, Peter Sprouse, Terri Treacy
Reported by: Peter Sprouse

Our purpose on this trip was to push the Leads Left in Brinco from the previous Thanksgiving trip (see AMCS Activities Letter #5), With the height of the dry season approaching we hoped for some good caving. Crossing at Brownsville Friday night was easy; except for finding our way through Matamoros, that is! We pulled into Victoria in the morning (March 12) for breakfast and headed north to Barretal for the long grind into the mountains. We made it up to Conrado Castillo in a quick 5 1/2 hours from the highway,

After morning R&R on March 13 two teams entered Brinco. Thomas, Robert, Jerry, and Katy headed to the area past the waterfall. They pushed from the Laguna Verde Cutoff and explored several hundred meters of new passage. Trash in the streamway hinted of another entrance but if so cavers stopped before reaching it. On the way back they took a wrong turn, accidently discovering a new and bigger streamway! They explored down this until Katy took a 3 meter fall into a deep pool. She was shaken, having lost her helmet (poor chinstrap) and light into the deep pools. Meanwhile Terri, Sheila, and I continued the survey from Eternity Junction, the cave's deepest point at —162 meters. Our at —179 meters where we encountered sump mud all over the walls in the dead end Pig Wallow. We wrapped up leads on the way out.

The next day was pretty much an R&R day, In the afternoon Terri and I and sketch mapped partially explored Cueva X, a higher, vadose cave which may connect with Brinco. On March 15 caving spirit ran high in camp as Ediger, Jerry, and Robert prepared for a survey trip upstream from the Laguna Verde Cutoff. Sheila, Terri, Thomas, and I set off to the entrance in town discovered the previous trip. The first team over 300 meters upstream (but not the downstream way where Katy fell) to a point only 15 meters lower than the entrance. This continues and could add depth to the top of the cave when surveyed. Our team found that the arroyo cave in town had a quick end in dirt and debris fill, so we decided to enter Brinco (sans Terri) to survey from the Laguna Verde, the best lead. This is a place where a low crawl leads to a waterfall room with a stream (the Rio Verde) passage taking off; it had 2 cfs flow in November but only a garden hose's flow in March, We mapped 40 stations downstream through well decorated passage with deep green pools, dropping steadily, I explored on past the end of the survey to a narrow squeezee with a goodly

breeze going into it, The next day our same team, plus Robert, returned to the Rio Verde. We surveyed down to a constriction which had to be enlarged with a rock to allow passage. I explored on alone through a sharp, swiss-cheesy area, Soon I noticed it was different than up to that point: the water, flowstone and air movement were missing. So I backtracked until I found a small hole going in the proper direction. This dropped down several climbdowns to a low rimstone area. Following the air I entered a low pool which I never reached the end of. Five to ten meters wide and with water often over my head, I followed The Canal for nearly 200 meters to where the ceiling narrowed in a constriction that threatened to blow out my light with its howling gale. Ahead in the distance was the powerful roar of a great waterfall. Returning to the others we decided to map down to the beginning of The Canal and then quit for the day. Our last station was 180 meters below the entrance, making this new section the deepest portion of the cave.

The following day, March 17, was to be our last day of caving in Brinco. Ediger, Robert, and Jerry set off to try to connect their downstream passage (Katy Fells) with the Laguna Verde, while Terri, Sheila, and I returned to try to survey The Canal. Ediger's survey party mapped 26 stations to a point which turned out to be close to Laguna Verde, but a connection remains to be realized. Beyond the last station it was dropping down and heading in the right direction. For our group, The Canal was a COLD survey. Even in wetsuits we were shivering. At the constriction where I had stopped our lights did get blown out as we surveyed and swam through. But strangely enough, once on the other side the roar of the impending waterfall was suddenly behind us! What had sounded exactly like the roar of a distant waterfall was actually the wind in the constriction. A few shots later The Canal ended in a blank wall with the only way on being up, We ended the survey and explored ahead, Sheila and Terri checking one passage while I took another. Soon we joined up again, with the others reporting having past several side leads. Although the passage was still climbing it still seemed like downstream. Soon I left the others behind, running down virgin passage following the air flow. Finally ahead I could hear the sound of echoing water - not wind this time!! Continuing on I entered a room with a stream, the largest in the cave though only a moderate flow this time of year. Taking a passage to the left I crawled into an enormous trunk passage; the biggest in the cave and scoured clean and wet to the ceiling! After looking a short ways to the right and left I returned and met the others a short way back. Together we explored left in the trunk, the direction of the water and air flow. We went for over 100 meters to where swimming was once again unavoidable. Upstream also led to swimming. We dubbed this new section "The World Beyond" so unlike the old cave it was. We left the cave with shredded hands and wetsuits,

We had a leisure journey back to Texas, stopping on the way at El Chorrito, where thousands of Christian pilgrims had gathered in a festival to worship the Virgin who had appeared in travertine in the cave.

So Cueva del Brinco continues to yield amazing discoveries, In four (days of caving we had extended the cave's length from 2.1 kilometers to 3.2 kilometers (making it the 12th longest cave in Mexico) and also increased its depth. Take the air and water flow, add in the likely resurgence 1400 meters lower and I think you can gay that Brinco is just beginning.

Destination: Sierra las Alazanas and Cueva Los Hundidos, Coahuila
Date: February 10 - 14, 1977
Persons: Sheila Balsdon, David Honea, Janet Honea, Peter Sprouse, and Terri Treacy
Reported by: Sheila Balsdon

The objective of our trip, besides having fun, was to check several sinks (Hoya la Loba, Hoya Armenia, and Hoya los Sartenejas) in the Sierra de las Alazanas, near the town of San Antonio de las Alazanas. The town is located about 60km SE of Saltillo. Driving as far as possible, we parked at an elevation of about 7000ft, We continued hiking for several hours up an old logging road eventually reaching a high ridge at about 11,000ft. We camped in the first sink, Hoya la Loba, for two nights. Drinking water was not available on the ridge and had to be brought up from the stream about 1000ft below.

Although the ridge top is a reasonably developed example of Alpine Karst, no caves were located in any of the sinks, This was most likely due to heavy sedimentation in the sink floors and to the general youth of the development. Frost fracturing seemed to be an important mechanism in the karst development.

One family resides in Hoya La Armenia. Vegetation was typical of high altitude areas and included pine, spruce and aspen trees. Numerous trees had broken limbs or trunks suggesting a recent heavy snow. On the second afternoon of our stay, it snowed 1 to 2 inches. The high altitude record for snow frisbee was set at 11,000ft on February 12. The sunrise on the snow the next morning was spectacular as was a leisurely hike back to the vehicle.

Driving about 15km S of San Antonio brought us to the vicinity of Cueva los Hundidos. After waiting in the tents for a rain shower to pass, we took the appearance of a brilliant double rainbow as a good omen. A 30 minute hike brought us to the cave. We were not disappointed. The cave is developed in gypsum, the walls and ceiling show beautiful marbling of gray and white bands. The large trunk passage reaches dimensions of as much as 150ft wide by 30ft tall, ending in breakdown. The cave was surveyed, with a length of about 500 meters. We returned to the car after an exciting midnight hike through the desert chaparral to the tune of coyote howls.

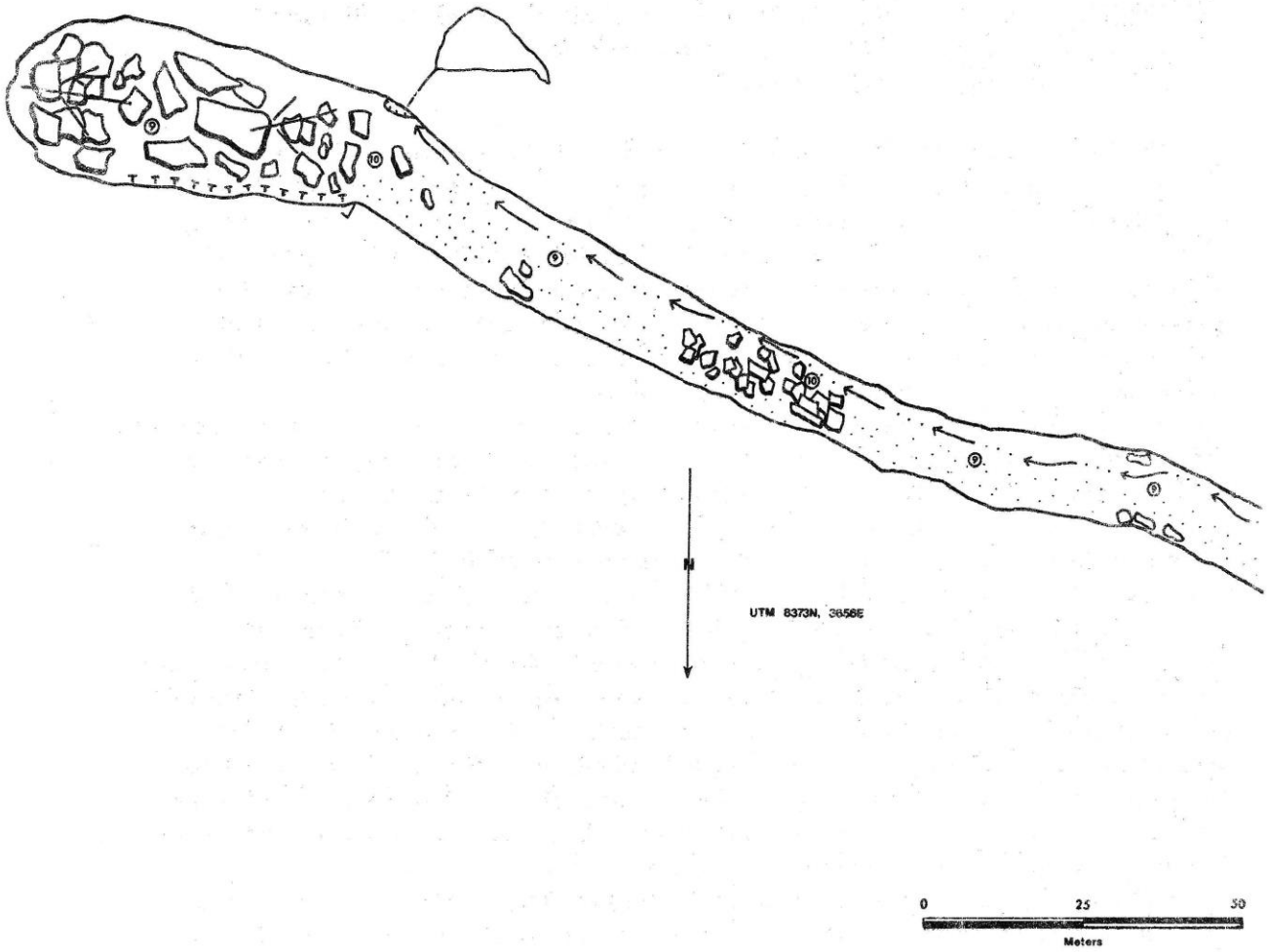
We drove to Monterrey on Monday the 14th. After visiting the Cetenal office to purchase maps, we gorged on Cabrito and left for the border.

Destination: Gorman Falls Cave
Persons: Glenda Born, Betty Huffman, Kathy Gann, Marshall Levitt, Robert Thompson, Leslie Davis, Sheila Balsdon, Don Broussard, Gary Napper, Andy Grubbs, and Logan McNatt.
Person Reporting: Logan McNatt [Date: March 5-6, 1977]

Gorman Falls Cave has been the first cave for many people. This trip was no exception, but there was an additional factor which made it considerably more interesting and enjoyable. Of the six people along had never been in a wild cave, five of them are blind or partially sighted. They had expressed interest in caving, and had recklessly agreed to trust their lives to five experienced cavers. It was a fun "experiment" for all of us, since the five cavers had little or no experience in being the "eyes" for someone else,

As always, we were late getting to the cave, so our time was limited. We paired off at the entrance, one caver for every novice, except for Leslie, who drifted among the group helping out whenever needed. Step—by—step instructions were given: "Step up a foot, down 1/2 foot, duck your head here, follow the left wall with your hand and crawl for the next fifteen feet, climb over this rock," etc. The system worked well, and the new cavers quickly adapted to the rough terrain. We made surprisingly good time, stopping ever so often to feel a formation or the texture of the wall, or listening to dripping water or the sound of large passage. Kathy used a cane in addition to her partner, and it was sometimes a help, sometimes a hindrance. Betty had decided to leave her German Shepard Seeing-Eye dog, NyLa, at home, which was probably a good idea, although there have been caving dogs in the past. We might explore that potential on another trip.

Only one or two bats were heard. Separation Lake was dry. The cave was full of about 25 other people, all of whom were on their way out as we headed in. Unfortunately, time ran out for most of our group, who were not planning to camp out, so six people turned around just before the muddy crawling starts, However, Don, Leslie, Glenda, Betty and I kept going. In the low muddy crawlways, the knee-deep trenches formed by the passage of numerous people made it very easy for Betty and Glenda to negotiate. We made it all the way to the back of the cave. Quite a feeling of elation for everyone, though we were too tired to enjoy it long. On the way out, the weariness began to show in a couple of amusing minor incidents. At one point, Glenda went left over a rock instead of right, and found herself in an awkward position on her back with her legs dangling into space. The concern in her voice struck Betty as terribly funny, and she burst into laughter while Glenda (mumbling) extricated herself. Betty's turn came, though, when after stooping down to wash her hands, she decisively announced "I'm going to stand up," followed by a loud "bonk" as she decisively crammed her hard hat into the ceiling. We Left the cave without further incident.


N
UTM 8373N, 3856E
0
25
50
Meters

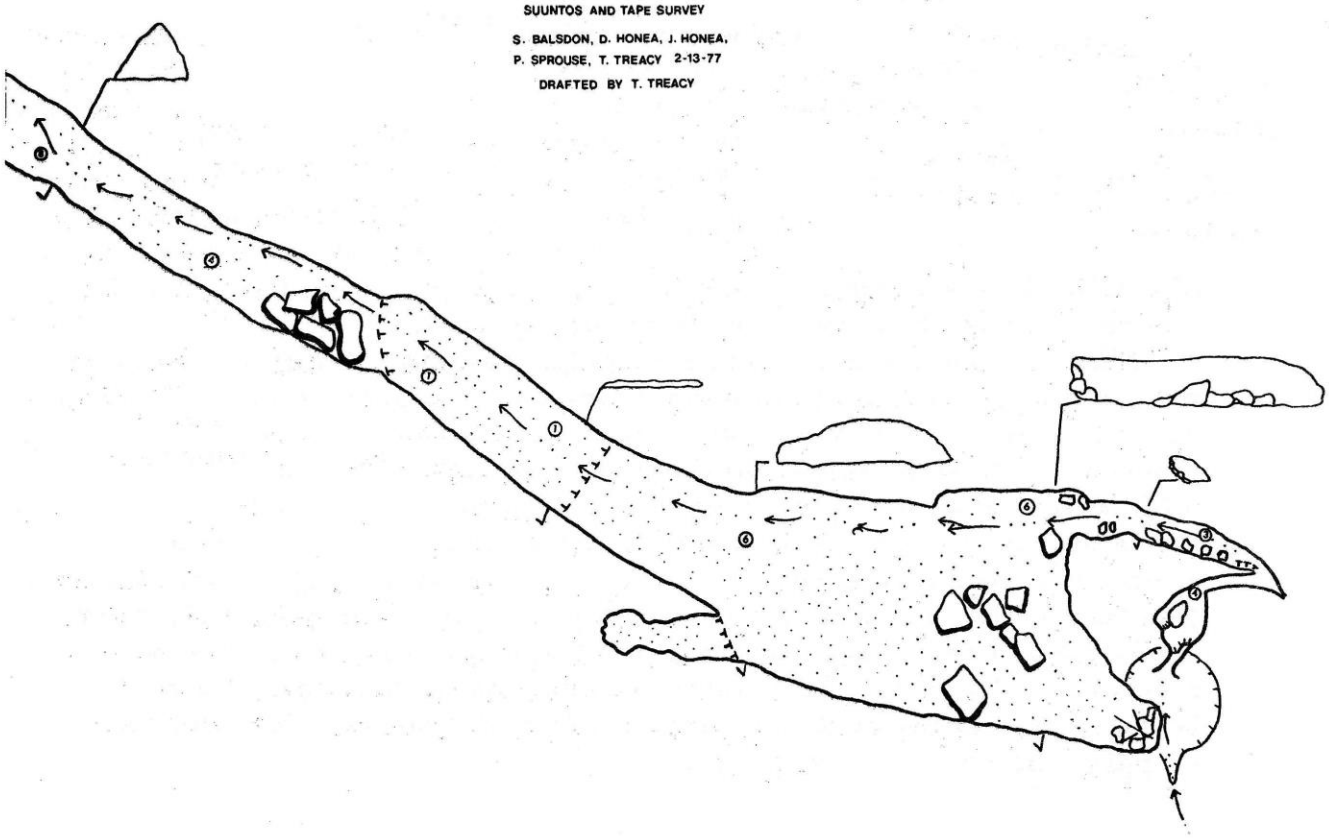
CUEVA LOS HUNDIDOS

NUEVO LEON, MEXICO

SUUNTOS AND TAPE SURVEY

S. BALSDON, D. HONEA, J. HONEA,
P. SPROUSE, T. TREACY 2-13-77

DRAFTED BY T. TREACY



This trip was an enjoyable experience for all concerned. Six people introduced to caving, and three of them made it to the back ail women. Caving is obviously a very tactile experience, and the feel— ing of the rocks, water, formations, and especially the mud were thoroughly enjoyed. At the time, five cavers got a different perspective of caving, and realized that you can "see" a cave without using your eyes. We hope to have another trip soon, and perhaps squeeze in a little ropework as well.

Destination: Hitzfelder Bone Cave
Persons: Joel and Debbie Gunn and Jasper, Lang Scruggs, Max Witkin, Neal Morris, Max Miller, Logan McNatt
Person Reporting: Logan McNatt

The purpose of this trip was to explore and map the cave. Excavations had been carried out there, and the skeletal remains of about 20 people had been found inside, thus the name. At this time it is not known to this writer if they are prehistoric or historic, nor the exact reason for their presence. We had reason to believe that a drop inside the cave had not been previously checked out, but this was not the case.

The entrance of the cave is located in a small shallow sink on top of a hill. For warmup we spent 1-1/2 hours searching the wrong hill, before being led to it by a couple of ranch hands.

Neal, Logan and both Maxes rappelled down the 10 meter drop and began mapping the main room, which is about 7 by 10m, with several 4 meter high domes and numerous buckets, old test pits, and electric lights were left from the previous work. Max Witkin headed out. A 10′ crawl leads to another dirt floored room, about 1/3 the size of the entrance area. A small hole just this crawl funnels into a 8m drop, which a 1.5 m wide fissure passage at the bottom. The fissure is about 10m long, winding down and ending in mud, where a test pit had been dug. An old pair of gloves, a shovel, and a hand pick were still there. Neal and Max checked out a couple of small leads in the ceiling of the fissure, but they did not go. We finished mapping the cave and headed out.

Destination: Williamson County
Date: March 20 [1977]
Persons: Tom Byrd, Keith Heuss, Martin Ratliff, Charlie Yates
Reported by: Tom Byrd

We tried to get into Coffin Cave but had no luck getting permission. From there we went Inner Space where we received permission to go to Quarry Cave - we mapped it and took photographs.

Destination: Mason County
Date: March 12, 13, 14 [1977]
Persons: Tom Byrd, Randy Farr, Al Heartline
Reported by: Tom Byrd

We located a cave in a sink on a topo map on the Millcreek Ranch. We mapped the cave and named it Rat's Nest Cave. On a hill a couple miles away we found two other small caves which didn't go. On the Tom White Ranch, across the road from the Millcreek Ranch, we were shown two more small caves - one with a rattlesnake in it. We noticed that all of the caves in the area, with the exception of Millcreek Caverns, appear to be filled with sediments, More Leads were obtained in McCullogh County at Camp San Saba.

THE TSA CONVENTION will be held April 22-24 [1977] at the SWTSU campus in San Marcos, Camping will be at the University Camp on the Blanco River. Hosts will of course be our neighbors the SWTG.

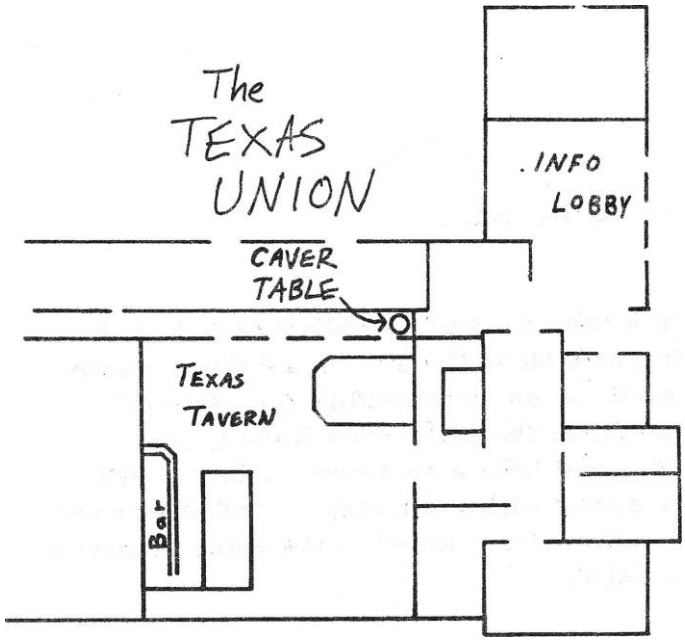
RADIO BROADCAST - 29 MARCH 1977 - Guam has begun protecting bats, but for a particular reason. Bats are considered a delicacy there, and the bat population is so depleted that Guam is buying 5000 bats from Tonga at $1.00 a piece. The Guamanian consumer pays $4—6 a piece. Tonga has a breeding refuge where thousands of bats hang from trees and can be simply knocked down.

To cook bat: singe off the hair
boil for 30 minutes
curry
cook in coconut cream

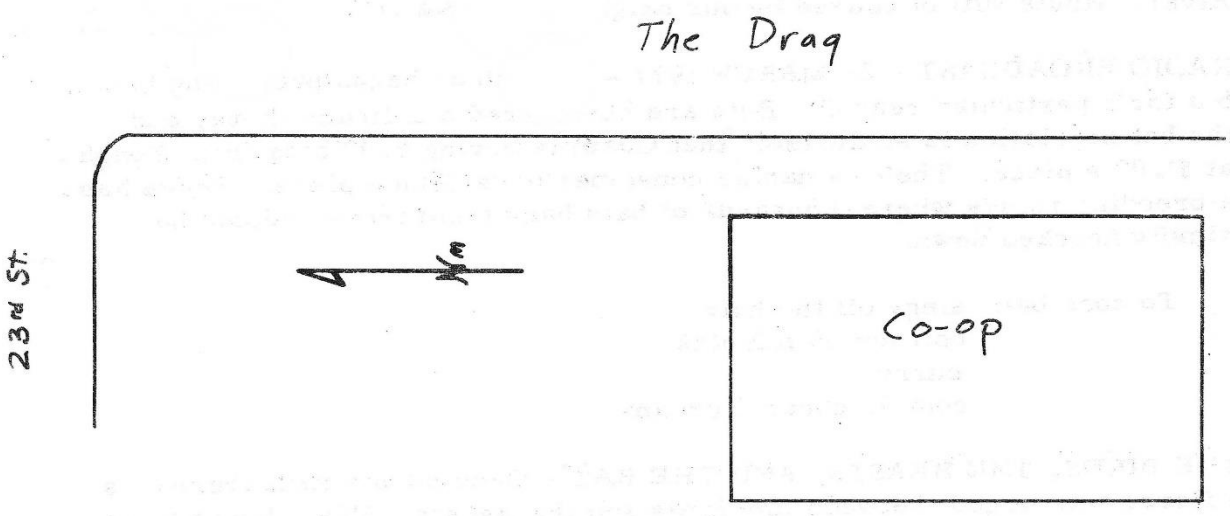
THE BIRDS, THE BEASTS, AND THE BAT - Once upon a time there was a fierce war waged between the Birds and the Beasts. For a long while the issue of the battle was uncertain, and the Bat, taking advantage of his ambiguous nature, kept aloof and remained neutral. At Length when the Beasts seemed to prevail, the Bat joined their forces and appeared active in the fight; but a rally being made by the Birds, which proved successful, he was found at the end of the day among the ranks of the winning party. A peace being speedily concluded, the Bat's conduct vas condemned alike by both parties, and being acknowledged by neither, and so excluded from the terms of the truce, he was obliged to skulk off as best he could, and has ever since Lived in holes and corners, never daring to show his face except in the duskiness of twilight. - James's Aesop

THE CHUCKWAGON

. . . . REINCARNATED



West
Mall



"INFORMACION CENTRAL"

It must have been July 1965 - almost twelve years ago — when Laidlaw and I pulled into Austin after a slow, cave—filled journey from Bloomington, Indiana after the N.S.S. convention there. As we found a parking place on the student congested "Drag", or Guadalupe Street, in front of the Co-op, we thought ahead in anticipation to the days of Mexican caving in the near future. We asked a local how to get to the Chuckwagon, and followed her over-the-shoulder stare into the maze of the University.

By winding our way through the tables toward the "Southwest corner" previously mentioned to us by Raines, Bell, Evans, et. al, we emerged at last upon a small round table surrounded by caver types and students. Our introduction to Mexican caving began here at the "Informacion Central", where first hand data on roads, caves, vehicles, people, gear, rope and parties sat conveniently at first hand. If a question was not readily answerable, the person with the facts soon filtered into view. Seven years later, McEachern and I got off a city bus and checked the hour by the conveniently placed tower clock. A little before noon, but sure enough, there was Bill Bell and Marsha Meredith sitting at the same table where I had left them years before. "Howdy, where you all been?" "Guatemala," we replied came the questions as we shucked our backpacks, setting into the familiar plastic of the Chuckwagon decor.

The Chuck-wagon hadn't changed in that time, but it was soon to close its doors as remodeling plans began circulating among the pork barrel politicians and work hungry contractors. Closing of the Chuckwagon brought an end to an era. The gap was filled somewhat by the various caver houses which in time became known as alternate information centers and crash pads for itinerate cavers from coast to coast, and Mexico and But the central location, with its drop—in atmosphere, was lost.

That is until last week, when the new Union opened its doors to the students, faculty, and all others fraternally related to the advancement of knowledge. Again, amongst the bustle of beer and burgers, comes heated discussion "of shoes and ships and sealing wax, of cabbages and kings" (Lewis Carrol). This time the Southeast corner of the Union has been chosen as the repository of first hand information on Mexican caving, but only time will tell if this truly again becomes "Informacion Central”.

by Ron Ralph

CONGRATULATIONS - to James C. Solimine, the Grotto’s newest NSS member, #18065.

CANDIDATE SUSPECTED OF UNDERGROUND TIES - City Council Place 1 candidate, Bernard Duck, is rumoured to be, or have once been, a caver.

ROOM ON KIRKWOOD - Bill Stone will be looking for a roommate beginning May 1.

AFFIDAVIT OF TITLE
DECLARACION JURADO

BEFORE ME, _____, Notary Public in and for _____ County, State of _____, personally appeared _____, who, after means of identification that __he is the above named person, takes an oath to the following:

1. That he is the legal owner, or drives with the permission of the legal owner, a 19___ _____ model, _____ automobile, motor number _____, license number _____.

2. That __he desires this AFFIDAVIT (DECLARACION JURADO) for the purpose of making a tourist pleasure visit into the Republic of Mexico,

3. That __he will not sell, or attempt to sell, or otherwise dispose of this vehicle while in Mexico, but will return to the United States of America with said vehicle in less than six months.

Signed _____

Sworn to before me _____ day of _____, A.D., 196__

_____

NOTARY PUBLIC

(SEAL