



CAVE History Update

A Newsletter from CAVE Cultural Resources in the Resource Stewardship and Science Division

CHU #8 —December 15, 2003

18th Anniversary of Spirit World Exploration at Caverns

Before the middle of December in 1985, the dome area in the ceiling 255 feet above the Top of the Cross seating area in the Big Room at Carlsbad Caverns was *terra incognita*. But three years earlier, in the Main Corridor, explorers experimented, took calculated risks, and developed an experimental exploration technique to gain access into a dome area in the ceiling 200 feet above the trail near the Baby Hippo formation.

In 1982, for Carlsbad Caverns cave specialist Ron Kerbo, not knowing if passage *did* or *didn't lead* out of that dome area 200 feet above, aroused his curiosity intensely; who knows, maybe curiosity similar to the degree that cowboy Jim White had felt about first exploring the cave around the turn of the century. But how could an explorer secure a rope as an anchor over stalagmites twenty stories high?

Kerbo tells that sometimes after work he would go down to that area in the Main Corridor, stretch out on a visitor bench on the trail, look up at the dome, and think about how to get a rope around at least one of the formations called The Three Monkeys. He knew that shooting an arrow with an attached cord, or shooting a line-throwing gun, or casting with a fishing rod were all impractical because of the arc of the trajectory. He knew that riding a hot air balloon up to the ceiling was out of the question—how would you transfer from the balloon to the dome? And as for jet packs, certainly such equipment would not be acceptable environmentally with the National Park Service mandate to protect the cave resources—and even if the packs were not hurtful to cave resources, certainly the question of personal safety would be a major concern.

In a world of high technology, low technology—but with abundant creative thinking—was required. Kerbo's brainstorming, and the contributory ideas of others, over a period of time, eventually emerged into an apparatus to get the rope up and over the formations at the edge of the dome—a balsa wood oval "hook" with light-weight parachute cord attached, lifted by helium balloons. The repeated failures to snag the formations failed to diminish the perseverance of the explorers—and after four nights, the formations were hooked, a stronger climbing rope was attached to the parachute cord and pulled up and over the formations, then tied off at the bottom to produce a double rope. In October 1982, geologist J. Michael Queen and Kerbo, ascended (Queen first) into the dome area now known as the Balloon Ballroom. The question of passages leading out of the Balloon Ballroom was finally answered; no passageway went further than 20 to 30 feet.

Several times over the next couple years, floating a balsa wood hook with helium balloons to the stalagmite in the dome area was tried, but unsuccessfully. Finally, after several nights of failure, Tom Bemis, long-time and current employee of the National Park Service at the caverns, suggested using helium-filled seamed together dry cleaner bags, attached to the back of the hook to keep the hook level so that it could hook onto the stalagmite. On December 14, 1985, the successful connection of the rope was made and exploration of the dome area in the Big Room—soon to be named the Spirit World—began. Below is the transcript of an oral history that I (Bob Hoff, CAVE Park Historian) conducted in 1998 with Jim Goodbar, one of the original explorers of the Spirit World, along with Ron Kerbo and J. Michael Queen.

Cave Explorer Jim Goodbar Recounts *Spirit World* Explorations

HOFF: How did you become a part of the *Top of the Cross Dome Climb*?

GOODBAR: Ron and Michael had been talking about this and, you know, I'd been caving with Michael for quite a number of years also. So, they said well, you want to go? You want to do it with us? And, I said sure.

I think I was otherwise engaged in some other activity or whatever during the time that they actually sent the balloons up and snagged the formation with the balloons. I wasn't really involved very much with the actual hanging of the rope, the initial, original rope. But once the rope was hung, which I understand that it took two or three nights to do, with a lot of various modifications of the balloon hoop and all that equipment, then I came down, and we pulled the climbing rope up and got it in position, still not knowing what was on the upper end of that rope at the anchor point, what the anchor point was like.

So Ron and I doffed our vertical gear and looked at one another. Ron says, "Please go ahead, Jim." I said, "Oh, Ron, you go ahead first." And Ron replies, "Oh, no, no, no, no, you go first." "Oh, no, no, you go first," I said and added, "Ron, it's your cave, you go first." And he said, "Well, okay. We'll both go up."

And so, we both got on the rope 'cause we really needed to find out if this is going to hold? And so Ron got on the rope and climbed up about ten feet. I got on the rope below him and climbed up just below him and we both started to bounce on the rope. And we'd already checked out, you know, what's our escape route if everything comes crashing down, where are we gonna go, and, and how are we gonna get out of the way of all the rock and debris that's gonna come crashing down on top of us. We're thinking we would have at least a few minutes, or seconds anyway, to get out of the way. And so we kept bouncing and bouncing and getting all of the slack out of the rope. Wherever that rope was gonna wedge in we were gonna make sure that it was okay, that it wasn't gonna come down. So we did that for quite a while.

I said, "Well, it seems like it's, you know, secure, and I don't think it's gonna come down yet. Well, inasmuch as you're in front of me, you're above me, why don't you go ahead and, and I'll wait down here, and let me know what you find."

And so, it was getting on into the morning

hours and Ron started his ascent and he was, you know, some fifty or so feet up when, I'm not sure who it was who said, "how are you doing, Ron" which now that I think about it might have been Michael Queen. Ron said something to the effect that "it's amazing how fatiguing unmitigated fear can be." He continued up the rope however, and...

HOFF: That was only fifty feet up that he had that first check, you're saying?

GOODBAR: Yeah.

HOFF: Okay. He's already twenty percent up and he was already fatigued, huh?

GOODBAR: Oh, well, I mean it's not the actual fatigue of physical fatigue of climbing a rope. It's the other part of it. (emotional fatigue?). He reached the top and said that the anchor point up there was very good, definitely a solid anchor point, very secure, although that there was a flowstone slope that was immediately in front of the area where the two stalagmites were. The stalagmites were pure white and so he named them the *Pearly Gates*.

So, he changed over to a rappelling system and came on back down the rope. That next night, I believe I went up first, and I'd gone up with a bolting kit because it definitely, I mean, you needed some kind of protection, some way to get up. So, I went up first, and hanging on the rope just at the *Pearly Gates* set one bolt, put in a little folding three-step webbing ladder, and then stepped into that. When I put my weight into that ladder, I took my weight off of the climbing rope. The several hundred feet of rope lead extending from the secure point at the *Pearly Gates* down to the ground tie off, once it had my weight removed, started to pull back across to take the stretch out of the rope. This motion started to pull my gear up around my chest, a little unnerving there for a while with the rope trying to pull me off the opposite side, in which case there would be no recourse but to fall 255 feet. So, I went ahead and took care of that little problem, and then I set a second bolt up, reaching as high as I could with my foot in one of the rungs there and set a hanger for a second web ladder. At that point I was off the rope, off the climbing rope, and hanging there on the side of the flowstone slope there.

And then Ron came up. And he got up to where the *Pearly Gates* were and clipped into the

bolt, the first bolt that I'd put in, and also was on rope there. And he'd brought up a second rope that was a belay rope. And then I continued to bolt the way up to the ledge, or the small alcove on that side of the dome that we'd climbed up into. I think I set a total of seven bolts, and as I progressively went up, then Ron would belay me up from one bolting position to the next. I got up to a very secure place and then set a three bolt anchor because there was nothing to tie on to up there, and set an anchor of three bolts, hung the hangers, and put in a permanent rope that went back down to where Ron was.

And then Ron came up the rope that I had just set, and...we sat there for a while, contemplating where we were and how we'd gotten there, and grinned at each other a little bit. Happened to have a film canister, and he had a scrap of paper with him, so we started a little register there. I think Ron...that was December the 14th I believe, 14th or 15th, something like that, of 1985, and Ron's entry was "trust in the magic of the earth and it will set you free".

And so we sat there for a while and looking around at what leads were there, where could we go from here, how would we get there. And as you're looking out from the main trend of the joint passages you're in goes from the *Top of the Cross*, then towards the Bottomless Pit. And as you look in that direction along this main joint there's this gaping funnel which drops down into the Big Room, and then on either side of this funnel there's what looks to be very treacherous narrow route. And those routes would then be traversed, perhaps a year and a half or so later. Again, it was Ron Kerbo, myself, and Michael Queen. We had a lot of trepidation because of the way that the rock was, which would be the best route to go, on the left side or the right side. The left side was almost all flowstone, but it would take some bolting. And we really didn't wanna bash our way across and then set bolts, and use such damaging technical equipment to, you know, bash our way across, just leaving that kind of permanent stuff up in a special place like that was not really what we, any of us wanted to do.

HOFF: Is there an instability problem, potential problem, with bolting in the flowstone as well, or is that just as good as any other route?

GOODBAR: Um...it's probably the most secure (Hoff said "is it?") that you could, you could possibly use as far as direct aid. The bolts that I used were a aluminum alloy and...well, the anchors were, and they would eventually corrode. The bolts were stainless, and the hangers were stainless. But the anchors that

you actually set into the rock were only maybe an inch long, and they're only for exploration and not for permanent use. So, from an exploratory standpoint, we used those. From a long term exploration standpoint you would want, and I think they actually went back in and did so, to set some three inch long stainless permanent anchor points that would, you know, stand up over time a lot longer.

HOFF: Somewhere I either read some literature or heard someone say something that sticks in my mind: that up in the *Spirit World* there was flowstone that had the consistency of eggshells, that it was real delicate. Am I imagining that ?

GOODBAR: No, you're not imagining that. The left side was all solid, good flowstone it looked like. It would probably have been a much shorter jaunt from where we were to along the left side, and a lot more solid. The right side looked to be a lot of mud and insoluble residues and silts that were over there. Eventually, that's the side that we went along. Before we finally screwed up our courage enough to make that traverse, there were perhaps three or four trips that went up.

Michael Queen went up doing geology, looking at the fossil record to find out about where we were geologically in the reef. Bob and Debbie Buercher went up, Bob being an outstanding surveyor. There are a lot of bat skeletons up there and Debbie was, you know, would look at the bats and the bat skeletons. But Bob and Debbie as a team were very, very good surveyors. So they would do a lot of survey work, and basically using triangulation surveys, they surveyed across to the other side and were able to actually make maps of what things were on the other side without ever even being there.

HOFF: When did you decide to attempt that traverse up in *Spirit World*?

GOODBAR: We'd go down to Big Room and someone would say, "how do you feel about it? And the answer might be, "Ahhhh, it's not the night for me." So we'd leave it for another time. Next time Michael would be in town we'd talk about it. Well, then nobody really felt up for it. Then one evening we all got together again with all of our gear and everything down at the bottom of the rope.

"What do you think about it?"

"Well, I don't know."

"Here we are again."

Finally I just said, "okay, let's do it, I'll make the traverse." And so, we basically started out and, at

this time, I think we were pretty well assured that this was gonna be the night. (Editor's Note: Oct 2nd - 3rd 1986) I think Ron had contacted a friend of his, Craig White with NBC, and Donald Davis was there, with Ron, myself, Michael Queen. And so we went up.

I had taken some of my personal gear and equipment, lead climbing ropes and the sort, a whole series of slings and climbing gear, and started across. We'd gotten a whole crew up there, and Craig came up with his video camera, and basically we started across. The first 20 feet, 30 feet, was fairly easy. And underneath this little thin veneer of flowstone it was all pretty much soft mud, clays and silt. And as you would go across there, it would crack, break, bits and pieces of debris would start, you know, tumbling down and disappearing off the edge, and a few seconds later, you'd hear a crash on the floor below, giving you a constant reminder of where you are.

I was a little uncomfortable with having a film crew there, ah I say a crew, it was just one guy.

Donald Davis was providing the belay and that. I'd gotten over to where there was some pretty solid flowstone on the other side of the alcove where we were and put a sling on one of the formations with a carabiner and ran the belay rope through the carabiner and then moved out across a fairly steep expanse of flowstone. It sloped off rather dramatically. And at this point I was still, you know, on my own feet and not using the belay rope or any of the other slings as any kind of direct aid. I was holding on to a nubbin and looking off the edge of this flowstone slope as it rolled down and became almost vertical, dropping down maybe 8 to 10 feet to a small landing sticking out from the edge maybe a half a meter wide in diameter. And it was just this one little spot, one little landing right there, and on either side of that landing the wall was sheer and vertical, and at that point it just rolled straight off into the free fall expanse of the Big Room falling out of the *Top of the Cross*.

Looking back at where my belay rope was, I saw that one of the slings, because of the way the rope was coming through it, just about to pop off the nubbin that I'd placed it over. I was a little concerned over the rope position. I knew Donald was bolted in over there on his side, and was concerned that if I did slide off the edge there, I would experience a sixty foot fall and subsequent pendulum swing across the end of this funnel there that drops into the Big Room, so.....

HOFF: Possibly inducing cardiac arrest, you think (laughs)?

GOODBAR: Or an extreme need for a diaper change.

Nonetheless, you're at a point where you need to just either do it or don't, so I told Donald, "be ready because I'm gonna make the move." So I told him to give me some slack, and he pulled up a few feet of slack; then I told him to get ready, and I turned loose of the nubbin that I was holding on to and slid off that ten feet and landed on this little postage stamp resting spot. We named that area *Tranquility Base* after the *Tranquility Base* that the astronauts landed the spacecraft on the moon near to.

HOFF: Why *Tranquility Base*?

GOODBAR: Once you're there, you're a lot more tranquil than you would be in anticipation of your landing before you actually try it. And another thing is that you can be apprehensive and anxious and all these other things while you're contemplating such things, but once you've made the decision that this is what you're going to do, there is nothing but absolute resolution, and you become so resolute about what you're doing that your concentration, your focus, your every nerve and energy is put onto that one spot. And that's where you are going. And there is no room for mistake.

Like with the bolting activity, bolting up the edge. I've got a lot of time while Ron Kerbo was climbing up the rope to belay me later, and the rest of the bolting to think about—a lot of things. But as you're doing it, as you're up there placing the next bolt, as you're making that next move, when you're in the act of doing it, you become nothing more than a technician, and a very, very focused technician. And you're doing exactly what you're doing, and you have the presence of mind to know that you're doing it in just the perfect way. And it is your life that hangs on that. And so you make sure that you're doing it just the right way. So, standing there on *Tranquility Base* contemplating my next move, then we, I basically, it got a little bit easier after that. There was one more delicate move that had to be made, and that was going from *Tranquility Base* over to the sloping area, but you had figure out how to cross this one 4" or 5" expanse of blank wall. So, I had some sling with me—and long links of sling material—and I had an opportunity to practice my cowboy skills and use that sling as a lariat and lasso one of the more substantial formations on the other side.....

HOFF: Uh, huh. There's the link back to Jim White.

GOODBAR: And today, as you mentioned earlier, July the 11th is Jim White's birthday, so here's to Jim White.

HOFF: Wherever you are.

GOODBAR: I went ahead and secured as best I could a sling safety on the other side and continued to be on belay, and moved on across that slope. There's a lot of debris that started to fall down and crash below. It was just one stealthy footstep at a time, and I finally got to an area, and it was getting like three o'clock in the morning by that time. I had come to a point where I had to go out along a thin jut of rock the edge of which basically dropped straight off, again into the Big Room. And there would not have been that much protection if I wound up making a wrong step. And given the hour, and the fatigue, and all of that I went ahead and set another three bolt anchor at that point. The rock at that location was very punkie, very soft. The air flow up into that area had etched the rock quite substantially, and so there was not a solid anchor point to bolt into. I finally located a spot where I could conveniently set a three bolt anchor, set that, put in my belay rope, and I went ahead and used my own belay rope, and tied that in as a permanent rope which stayed there for several years after that till the Park Service went ahead and replaced it with one of their ropes.

So, I came back over to the belay spot where everybody else was and, we all came back down the rope, and then went back up the following night and continued the traverse around there, and that part of the traverse I think we named the *Night Climbers Lament*. So, I picked up where I'd left off the night before, and after not too much time had made it to the other side, on a safe ground. I was able to unhook, unclip, set another three bolt anchor on the far side and a permanent rope there as well, so we had a rope that went to the far side which we named *Sacred Ground*. And so, from *Sacred Ground* all the way back around to the *Spirit World* there was now a permanent rope set. On that night, I had gone, as I recall to find out whether or not that passage went, and basically went back two or three hundred feet, finding that it definitely went. We need some subsequent trips up there to do some survey, geology work, mineralogy, and some folks to look at the fossils. On subsequent trips, we checked some high leads in the back, I believe it was Ron Bridgeman, Donald Davis, and myself.

One interesting anecdote. On one of the subsequent trips that Donald Davis came in on—as you enter the area of *Sacred Ground* there's an alcove, there's another small room on the right hand side as you enter the area. I had gone down into that area and it had some loose rock scattered in there.

Some rock clattered off down into this funnel hole down there and it started raining down in the amphitheater. And rocks were crashing down into the amphitheater where people were, and Ron Kerbo was down there and saying "no more rocks, no more rocks."

I knew what he said. And so jokingly I called down "more rocks?"

"No, no more rocks."

"Oh, more rocks? Yes, I'll throw more rocks down there."

(Hoff said "I can just hear Ron") We bantered back and forth and of course I didn't throw any more rocks down there. Although, on this one occasion Donald Davis was checking this area out. I knew that it went all the way down. And he was down there, you know, scoping that area out, and I heard him yell, and then silence, and I thought for sure he had slipped through the hole in the bottom of the floor and the next thing I would have heard would have been this thud in the amphitheater.

"Donald, Donald, are you okay? Are you there? Donald?"

"Yes, I momentarily slipped - I'm okay."

And, it was just like, oh my Lord, you know, my worst nightmare to have someone fall out of the ceiling of the Big Room. And as far as other trips, of course, none of them would be as memorable as the first trip across and my first walk down that virgin passage back towards the Bottomless Pit.

HOFF: Making sure I understand this, the traverse was completed the night after Craig White went up? Is that what you're saying?

GOODBAR: It took two nights to do that.

HOFF: So, did Craig White go up both nights?

GOODBAR: No. He only went up one night.

HOFF: So, this took place in October 1986, about ten months after the original climb into *Spirit World*.

GOODBAR: Could be. Seems like it might be. About a year or so.

HOFF: I find that very interesting—the feeling that such and such a night is not a good night for the climb. That is like the Jim White quote that was in a Carl Livingston article once where White said "we never bit off more than we could chew," you know, only taking cave trips one step at a time. Maybe that is what Lance Mattson is talking about with the "ju ju."

And yet, that strikes me as odd that you would try that on a night that you'd have a cameraman up there. I would think, from my perspective, that'd be the last thing I'd want is to have someone videotaping me as I tried something brand new and challenging like that traverse.

GOODBAR: Well, that was one of those things that I really didn't have anything to say about (Hoff said "right"). It did make me a little nervous. One of the things about that was the brilliant movie lights they were using (Hoff said "oh, yeah"), and here I've got a little carbide light, and you're looking at moves, and you're looking at things that you're about to do, and you've got this certain level of light. But when they turn that light off, I mean everything goes almost black. And so all of a sudden it's like you need to completely readjust. It was a little unnerving there because of the changing level in intensity and colors of light and getting used to your little amber colored carbide light again. I guess on the original climb Ron named the *Pearly Gates*, and then after I'd bolted my way up to *Spirit World*, and we named that little section *The Book of Judgment Climb*. And only those who are pure of heart, and soul and spirit can make that climb up into the *Spirit World*. Then, you know, it's basically a series of named climbs and traverses by which you make your way over to *Sacred Ground*.

HOFF: What are some of the other names?

GOODBAR: *Punk Rock Pinnacle* was the three anchor that was halfway across the traverse because it's this little pinnacle of bedrock that jutted out, and it was so punkie and soft that.....

HOFF: Punkie means?

GOODBAR: Soft and very friable, and not very competent.

HOFF: And also, what is a nubbin?

GOODBAR: A nubbin is just a very small nub of a rock that—in this instance it was a progenitor of a stalagmite, you know, just a very small nub of a stalagmite sticking up, something you can just barely hold onto because there wasn't much of it there.

HOFF: Tell me, since *Spirit World*, have you ever been interviewed before or spoken to the rangers out there about your exploration?

GOODBAR: Not formally.

HOFF: You're a good story teller. Is it possible that you might sometime come out and talk to the rangers about *Spirit World*?

GOODBAR: I would probably say yes but I would definitely say yes if you could convince or coerce Ron Kerbo to come down and be part of that. And which, of course, the ultimate would be if Ron Kerbo and Michael Queen would be there.

HOFF: That would be ideal.

GOODBAR: The more people involved, of course, the more difficult the job of coordinating would be, but I think to get the full range of perspective, and emotion, and background and detail that those, those three would be the ones to have.

HOFF: The *Spirit World* is a very important story to tell at the Caverns, isn't it?

GOODBAR: I think what it shows and truly reflects on is one of the great men of Carlsbad Caverns and that's Ron Kerbo. His spirit for exploration, his spirit and love of the earth and quest for the unknown, and exuberance for finding out, is the only reason that it ever occurred. The love of the earth, and not wanting to bash his way up, and that's basically what they did at *Liberty Dome*, but he didn't want to do that at the *Spirit World* at the *Top of the Cross*. And he wanted some other way to be able to do that, to see what's up there without having to, to bang bolts into the rock all the way up. And so.....

HOFF: Could that have been done? Could someone have gone up the side and across? I know that in the movie "Cliffhanger" where Sylvester Stallone plays a park ranger, it's pretty obvious he's the type of macho who might make it.

GOODBAR: There's always someone who can without very much finesse brute their way up and that's what we wanted to avoid. We wanted be able to do the exploration, to find out what kind of resources do we have there, what are we dealing with, with the least impact possible? As a manager, you need to know what kind of resources are out there. And if nobody had given the okay to go through that next treacherous dig with the possibilities of collapse and all of that at Lechuguilla Cave when they first broke in, we would never have known that there was a cave such as Lechuguilla. Without that spirit of "let's be as safe and cautious and retrospective as we can," but we need to know. We need to know.

HOFF: At the *Top of the Cross*, I tell visitors that the *Spirit World* explorers went up there wanting to find possible leads. And that those explorers provided us with basic scientific information, and the more information we have, the better we can preserve this cave. We can only appreciate and preserve things we understand.

GOODBAR: And, as an interpreter, and as a park ranger, I think it's also your business, your job, to be able to interpret those things that the public may not be able to see or go, but would add and give to them a much finer appreciation for, what is this resource? Where does that go? And that's part of an interpreter's job I believe is to spark imagination and interest in....curiosity within your own mind. What would it be like to be climbing on a rope not knowing what it's attached to, not knowing whether it's gonna come crashing down.

HOFF: The *Spirit World* certainly has great potential for a story to interest our visitors.

GOODBAR: Anymore, I call it The Attic. (Hoff said "The Attic?"). There's a *Spirit World* up there, and you can see up into that hole, and then, all this...see this big joint in the ceiling runs down through here? That's all The Attic. You know, that's the upper area up above the Big Room. And it goes from here all the way down...well, you see down there where that...and, you know, I've been on the Big Room, I mean...yeah, I still enjoy very much doing the walk downs and the Big Room tour. And, I take my two year old son, and he loves it. But what he doesn't like is staying on the trail. That's a difficult job to, to maintain him 'cause he wants to go off and go climbing. He wants to go climb on the rocks. Go climbing, daddy, go climbing. And, he wants to go explore. And, that's great. I think it's wonderful. But to be able to...ah, so I'll be there in the place and get to the *Top of the Cross* there where the amphitheater is, and on one occasion I've been there as a ranger was talking. Sometimes they talk about the *Spirit World* and sometimes they don't. And on this one particular occasion was there, this person was talking about the *Spirit World* and, I was being in rather an ornery mood at that time, and just kinda was looking up there and looking up there, golly, what kind of crazy people would ever wanna go up there? And, I just listened to what the ranger said and, you know just...and I didn't, you know, say who I was or anything like that. I just...I like to just hear what they say. And I just went on down the trail. I've been there at other times and said, oh, I was up there once. Yeah, I was up there like the

first time people ever got to the top. Well, who are you? I'm Jim Goodbar. Oh, oh, oh, well, I've heard of you. Well, yeah, I guess. So, you know, it's just interesting to see what people say, and stand in the background. It's interesting to hear what...and I can't remember for the life of me who it was that was telling me that Gary Matlock had come through, and that he was talking to this one ranger and he said, yeah, I'm Gary Matlock. And apparently this ranger heard of Matlock's Pinch and all, and it was like...of Matlock's Pinch? And he said, yeah. Of course apparently now he's quite the ponderous guy and would never fit through there again but...oh, wow, let's talk. All that kind of stuff.

HOFF: I enjoyed talking to Lance Mattson and Harry Burgess about their trip into *Spirit World* last month with you. You all have such interesting perspectives. I'm amazed at your grasp of the details and what you remember, but to me it's like the details you remember about your son being born or getting married. I mean it's such a pivotal experience in your life I would think...maybe I'm stretching that but...

GOODBAR: Well, it's quite vivid, and you do become quite fixed on exactly what you're doing because your life does hang in the balance right there. And anytime you talk to a climber or a caver or someone who's done some of those things that are...definitely have an air of the possibility of dying (chuckles) imminently, then those things are definitely memorable.

HOFF: Is there evidence of scientific things worth pursuing in *Spirit World*?

GOODBAR: Well, I think the real good photos that I was hoping I was going to get for fossil records didn't turn out. And so it would probably need to be photographed again just to show...you know, there's some outstanding fossil stuff up there. As well, there's lots and lots and lots of bat skeletons all over, and perhaps some of those skulls could be either identified in place, which would be the best thing, by someone who could do that, or collected and studied, identified, and then taken back.

As far as leads, it was very interesting. There's a video that was put out called "The Spirit of Exploration" by the Carlsbad Caverns/Guadalupe Mountains Association, and one of those segments in there is about a trip up into the *Spirit World*. And that was when Patty Kambesis and Dave Monisett, myself, Tom Zanes, and had gone up. And I had made this climb in the back of the Spirit, you know the back of that long passage, and there was definitely

when I first got there and I had done the original climb in the back section of the cave, or that passage. And it got very, very narrow. I mean you couldn't even squeeze your head through there. You couldn't get through, it was bedrock on both sides, but you could shine your light back through there. And...it opened up on the other side. But there was no way that you could get through. And so, on this particular filming event that Tom Zanes was filming on—Brad Jennings was the other member of our team—everybody had to try and go up to see if they could do this. And so, Patty goes up, and she's obviously the smallest one of us, and she couldn't get through. And Dave Monisett went up and Brad went up and, you know, everybody goes up to see if they can squeeze through there. Nah! You can't do that. When the video came out it was interesting because Patty Kambesis got to that point and, you know, it was like she was doing this original climb—exploring new passage, the spirit of exploration. She climbed up to this area, it got very narrow, and there are a lot of these small soda straws and helictites and delicate formations, and though the cave “went,” she didn't want to break those delicate formations and continue the

exploration so, that part of the cave remains unexplored. Well, it sounds good for a script, and it's good story line, but it's not true, you know, it's not true. She wasn't the first one up, there weren't a lot of delicate formations there. What stopped the exploration was bedrock too small to squeeze through.

HOFF: Sounds like the spirit of exploitation (both men laugh).

GOODBAR: But the principle is true. Resource protection is more important than finding out what is on the other side. Crashing through a bunch of beautiful formations *just* to see is not worth it. We've definitely not gone “beyond” because of potential threats to formations. Everyone must take care of these special resources in whatever capacity they encounter them.

HOFF: Thanks, Jim

GOODBAR: You're welcome.