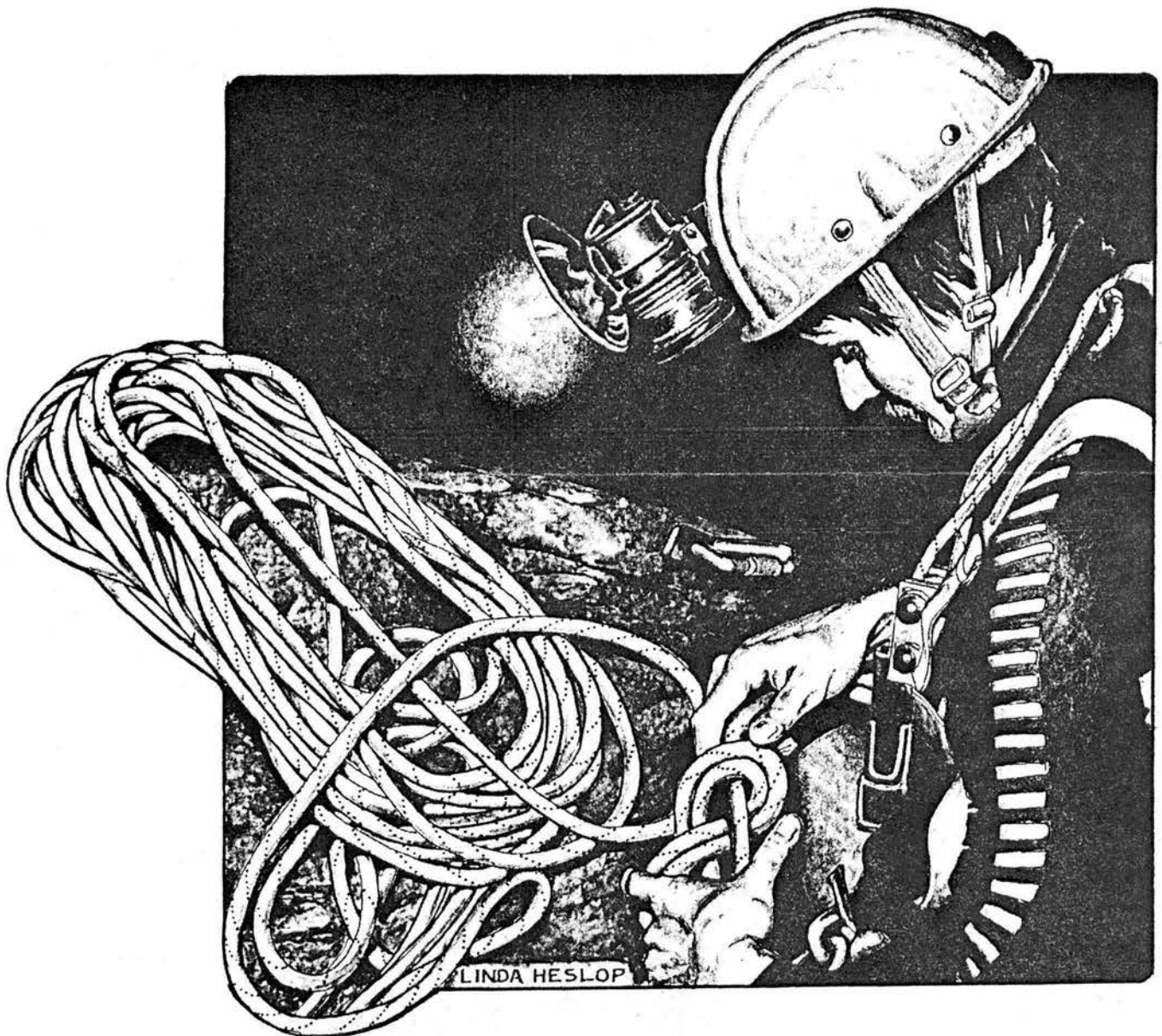


# *Cascade Caver*

Volume 29, No. 3-4  
March-April 1990



# Cascade Caver

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**Cover** "Rigging" in Jewel Cave, drawn by Linda Heslop from a photograph by Scott Fee.

# Cascade Grotto

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Editor . . . . .	Ben Tompkins . . . . .	206 546-8025	Trip Coordinator . . . . .	Jim Harp . . . . .	206 283-3369

**Mailing Address** Cascade Grotto; P.O. Box 75663; Seattle, WA 98125-0663.

**Monthly Meetings** Regular grotto meetings are held monthly at 7:00 pm on the third Friday of each month at the University of Washington, Room 6, in the basement of Johnson Hall.

**Business meetings** Business meetings are held on the first Monday of even-numbered months at 7:00 p.m. The location varies so contact a grotto officer for specifics.

**Dues** Members and subscribers please note the date on your mailing label that indicates when your dues expire.

**Overdue:** 11/89 John Day, Robert H. Martin, Art Tasker, 02/90 Jeff Forbes, Robert Henderson, William C. Holmes, Rob Lewis, Karl Steinke, Kay A. Willhight, 03/90 Chuck Crandell, Jim Harp, Shaun Larson, Alan Lundberg, Molly McBride, Mark M. Wilson

**Due:** 04/90 John Collins, Robert DeWolf, Randy Vance, Richard Walter, Kevin Greenwood, Peter Henry

**Coming:** 05/90 Boyd E. Benson, Robert Brown, 06/90 Rod Crawford, Larry McTigue, Wayne Cebell, Mike Ramey, 07/90 Dr. Eugene Kiver, Dr. Stephen A. Gates, 08/90 Kevin Bagley, Robert Stitt

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## Grotto Notes

### New members

The practice of introducing new members in the Caver has been neglected since about May, 1988. To get caught up, here are the newcomers since then that are still members:

05/88	Gregory, Steve	(206) 784-7995	9025 Cyrus Avenue N.W.; Seattle, WA 98117
	Benson, Boyd E.	(206) 546-1410	18020 - 4th Avenue N.W.; Seattle, WA 98177
	Cebell, Wayne	(206) 491-6219	7026 Puget Beach Road; Olympia, WA 98506
08/88	Bagley, Kevin	(206) 338-2484	9710 - 24th Avenue S.E.; Everett, WA 98208
10/88	Bjornstedt, Walter and Anita	(206) 877-5751	North 21020 Highway 101; Shelton, WA 98584
	Verbarendse, Marty	(206) 821-8163	14505 - 127th Lane N.E. #N-32; Kirkland, WA 98034
11/88	Benson, John and Coreen	(206) 851-7417	10619 - 82nd Ave N.W.; Gig Harbor, WA 98335
	McBride, Molly	(206) 236-5686	9007 Shorewood Drive #535; Mercer Island, WA 98040
	Rockwood, Kris	(206) 236-5686	9007 Shorewood Drive #535; Mercer Island, WA 98040
	Wagner, Mike	(206) 282-0985	2770 Westlake N.; Seattle, WA 98109
	Erickson, Phillip		2612 - 1st Avenue West; Seattle, WA 98119
01/89	Steinke, Karl	(206) 271-1260	13125 S.E. 149th Street; Renton, WA 98058
	Henderson, Robert and Chris	(206) 742-8922	14918 63rd Ave West; Edmonds, WA 98020
03/89	Curry, Monte	(206) 881-0849	1617 - 285th Place N.E.; Carnation, WA 98014
	Greenwood, Kevin	(206) 527-2550	6057 - 6th Ave N.E.; Seattle, WA 98115
	Daniel, Karen	(206) 881-0849	14703 N.E. 39th #1028; Bellevue, WA 98007
04/89	Henry, Peter	(206) 632-4356	4222 Thackeray Place N.E.; Seattle, WA 98105
06/89	Ramey, Mike	(206) 325-7271	P.O. Box 23164; Seattle, WA 98102
07/89	Gates, Dr. Stephen A.	(206) 839-9226	1218 SW 301st Street; Federal Way, WA 98023
10/89	Zak, Dan and Louise	(206) 483-1947	13305 N.E. 171st Street #337; Woodinville, WA 98072
	Rideout, Curtis	(206) 698-3861	8845 Towne Place N.E.; Bremerton, WA 98310
	Moon, Steve	(206) 252-4405	P.O. Box 353; Everett, WA 98206
01/90	Garratt, Roger	(206) 575-2846	P.O. Box 58551; Seattle, WA 98138-1551
02/90	Hollenbeck, Greg	(206) 668-7578	21307 E. Lost Lake Road; Snohomish, WA 98290

## Upcoming Events

Here is our current list of planned and proposed trips. Call the trip leader or Mark Wilson, grotto trip coordinator, for more information. Any other trip ideas are also welcome, contact Mark at 283-3369.

- Apr 20 Regular GROTTO MEETING followed by regular business meeting.
- Apr 21 Senger's Talus Cave. Rod Crawford, 543-9853.
- May 18 GROTTO MEETING
- May 19 Gardner Cave gate planning trip. Mark Wilson.
- May 25 (May 25-28 Memorial Day weekend)
- Northwest Caving Association (NCA) Regional gathering in Utah. There are some nice caves in this area and lots of other things to see on the way. It's a bit of a drive but plan ahead and carpool or caravan. Ben Tompkins, 546-8025.
  - Vancouver Island, Cascade Cave. Jerry Thompson, 355-4900.
  - CRF project at Lava Beds National Monument, CA. Rod Crawford, 543-8953.
- Jun 4 Grotto Business Meeting
- Jun 15 GROTTO MEETING
- Jun 16 Gardner Cave gate construction trip. Mark Wilson.
- Jun 17 NCRI Pryor Mountains Project. Spend four days in the mountains of Montana looking for new caves, relocating previously-known caves, and surveying. Contact John Buchanan, project coordinator, at (509) 359-7493 or in the Seattle area contact Ben Tompkins. (June 17-20)
- Jun 23 Third year of the NCRI Jewel Cave Project and final year on the existing contract. Eighty-some miles of mapped cave. Take part in inventory, writing route descriptions, reflagging trails, and radio location work. Contact Steve Sprague at (206) 652-6489. (June 23-30)
- Jul 1 Lava Beds Nat'l Monument restoration trip. Rod Crawford, 543-8953. (July 1-7)
- Jul 9 NSS Convention in Yreka, California. (July 9-13)
- Jul 20 GROTTO MEETING
- Jul 28 Mt. Index Ice Caves. Howard Hoyt, 782-4567.
- Aug 6 Grotto Business Meeting
- Aug 11 Deadhorse Cave, Trout Lake area. Bob Brown, 569-2724. (Aug 11-12)
- Aug 17 GROTTO MEETING
- Aug 31 Papoose Cave, Idaho. Jim Harp, 745-1010. (Aug 31-Sep 3 Labor Day weekend)
- Sep 22 Cave Ridge. Jim Harp, 745-1010.
- Oct 6 Windy Creek Cave. Jerry Thompson, 355-4900.
- 1991 - NSS Convention in Cobleskill, NY
- NCA Regional in Idaho (tentatively).

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## 1990 Northwest Regional

Just another reminder that the 1990 Regional gathering of the Northwest Caving Association is coming up at the Great Basin National Park in eastern Nevada over the Memorial Day weekend. The lower loop of Gray Cliffs Overflow Campground has been reserved for our exclusive use. The dates are May 26, 27, and 28.

A wide variety of interesting limestone caves await the explorer, according to the Utah Grottos who are hosting the event, including the Baker Creek System which is Nevada's longest cave, Whipple Cave with its massive formations, the well-decorated Goshute Cave, and Crystal Ball cave which is completely coated with large nailhead spar crystals. Other well-known caves to visit include Snake Creek, Indian Burial, Oldmans, Rose Guano, Leviathan, Cave Valley, Antelope Springs, and of course, the ever-

beautiful Lehman Cave. Many other smaller caves are also nearby.

A registration fee of \$3.00 will be charged for each adult (kids under 18, free). The guidebook available for \$7.00 will include maps and a road log to most of the caves.

We will be camping in the country's newest National Park on their busiest weekend of the year so camping space will be very limited and it is important that participants advance register as soon as possible. Registration forms and a sheet with more details are available from Ben Tompkins or Mark Sherman. Information may also be obtained directly from Dale Green, 4230 Sovereign Way, Salt Lake City, UT 84124. (801) 277-6417 (h) or (801) 524-3450 (w).

## Notes from the NSS

By Ben Tompkins

**New Grotto** - The NSS Internal Organizations Committee announced last month the chartering of the Oregon High Desert Grotto, P.O. Box 5161, Bend, OR 97701. Those who attended the Bend convention will know that this is a good area for caving activities.

**Cave Register Study Project** - John Wilson of Richmond, VA is starting a statistical analysis of data found in cave registers. Anyone interested in contacting John about including data from our own cave register program or finding out more about other caver register programs should see me for a look at John's article in the 1/90 NSS Administrative Memo.

**Summer Study Programs** - Programs for fun or college credit (or both) are listed in brochures from the Center for Cave and Karst Studies including a number of classes at Mammoth Cave, Kentucky, and one in Mexico.

## Talus Caves Update

West Tiger Mountain

By Howard Hoyt

On Wednesday, March 21, I met with Doug McLennan and Susan Combs of the Department of Natural Resources about the restoration of the cave area. High publicity and record numbers of hikers in the Issaquah Alps last year combined to cause damage to the caves and the surrounding area. The Department of Natural Resources, at the Cascade Grotto's request, already have removed all signs showing the way to the caves and is going to remove mention of them on their maps. Furthermore they were excited to put up two of the Grotto cave signs, one next to the trail at the entrance of the rock shelter and one in the entrance chamber of the main cave itself, for the education of visitors to that area. As the closest caves to Seattle, these caves see more usage than any others around. Hopefully, the new signs will help visitors appreciate and respect the area more and will serve to direct potential cavers to the Grotto.

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## Greece, 1990

By W. R. Halliday, M.D.

Even with the decay of the American educational system, most people know that the roots of western civilization were first nurtured in Greece. And speleohistorians have long known that in the post-Medieval mainstream of western civilization, the first cave to become truly celebrated (aside, perhaps, from Bethlehem's Grotto of the Nativity) was the Cave of Antiparos, also in Greece.

Early in 1990 TWA offered a rock-bottom fare to Athens so Sis and I took advantage of it during her Spring break in March. It was a vigorous and rewarding week.

Athens is expensive, our trip was cut-rate, and our hotel room was not the greatest. But it sufficed and even had a view of the gleaming marble columns of the ancient Parthenon atop the limestone mesa called the Acropolis. After checking in with Mme. Anna Petrochilou (who, with her late husband John, founded the Hellenic Speleological Society in 1950), we signed up for the basic tours about Athens and to Delphi a few miles to the north, the great shrine of Apollo and earlier gods.

The next morning was basic Athens, mostly the age-old ruined temples of the Acropolis, high above the immense huddled sprawl of modern Athens. But

while tourists gazed at the ruins, my eyes were drawn to fenced-off cave entrances on the south and east flanks of the Acropolis. After looking at it from every possible angle outside the visitor-proof fence, I concluded days later that the black hole on the east is only a shallow grotto, its ceiling and walls blackened by centuries of smoke. But the other -- considerably modified by man -- turned out to be the Grotto of Pan, the hoofed, horned demigod of wine, women, and song, and perhaps also the original cave god. It is evidently only a small cave but, located in the world's most famous complex of temples, links ancient and modern cavers. There also seems to be many other grottoes of Pan in Greece.

In the afternoon we were honored by high tea at the home of Sorbonne-educated Mme. Petrochilou, amid her wealth of cave-related art and awards received during a lifetime of service to speleology. In my appalling high-school French, we discussed Greek caves and caving, and planned a week's schedule. Her favorite cave, Glyfada, is one of the world's most beautiful show caves but lies far to the south beyond historic Sparta and requires one and a half days, more time than we had. But Koutouki Cave, where she and her husband descended 125 feet by ladder in 1938, is

now a show cave just beyond the suburbs of Athens on the far side of Mt. Hymettus. We planned to go there after returning from our first goal which was Antiparos.

The next day brought an all-day bus tour to the famous shrines at Delphi, located at the foot of the towering limestone cliffs of Mount Parnassus. Caves tantalized me en route. About 10 km off the National Highway and just south of the village of Aliartos was the truncated remnant of a small borehole. Farther on, big openings high on sides of Mount Parnassus itself beckoned like the Sirens of old. Delphi, the famous Castalian Fountain where priestesses and worshipers purified themselves before rites 2500 years ago, proved to be a curious little karstic resurgence heavily modified by man. In vertically bedded limestone, it is far above base level and emerges from an enlarged cavernous fissure running almost parallel to the cliff side. Up near the ancient stadium near the highest point in the site, are some shelter caves. We ran out of time and, for all I know, the bigger caves utilized dramatically by author Mary Stewart in My Brother Michael may really exist just a little higher up.

We started early the next morning for a 45-minute flight to the island of Paros and taxi to the ferry to Andiparos. Surprise! The 8:30 ferry had just left and since it wasn't tourist season yet, there wasn't a 9:30 boat. A cold north wind was blowing out of the Balkans but the sun was warm and a ruined building (recent) gave a bit of shelter. The little ferry duly arrived at 10:30 and by 10:45 we were on Andiparos. Surprise again! Since it wasn't tourist season yet, not a room was ready, including the one for which we had paid in advance. But the hospitable islanders rallied around and the missing innkeeper was summoned from Paros by the next ferry. Quickly we felt very much at home. Great people, when they aren't overwhelmed by tourists.

In tourist season an hourly bus runs the 9 km to the cave but for us the island's only taxi driver had to take time off from his construction job the next morning. Had we known it, the easy and cheaper way would have been to stay on Paros, rent a car there, take it on the ferry, and get the cave key from the Mayor's office. But the road to the cave, the taxi, and the bus were brand new and nobody off of Andiparos knew about them. It worked out fine and we had the pleasure of visiting the homes of some delightful people and eating authentic food in the local tavernas.

Even though I had seen old prints of the cave entrance, it was quite startling. Atop a spur of the island's highest ridge, behind a wooden fence and a sturdy gate, lay Hollywood's dream of what a cave should be. A huge mouth-shaped entrance arches fully across the top of the ridge, the upper lip a limestone cap so thin that it almost appears poured from concrete. It seems supported by huge fluted stalagmites extending far back into the twilight.

Cut into the body of one stalagmite was a rectangular recess a few inches wide. "In older days a tablet here celebrated a visit by Alexander the Great, in 380 B.C.," the guide insisted. "But Mussolini's men (actually he specified Mussolini personally) stole it during the war and it is now in Rome."

He then allowed me to go ahead on my own down steeply to a large, nicely decorated room where the French Ambassador to Constantinople celebrated Mass on Christmas in 1673. Then on down to the bottom of the cave, maybe 250 feet down, where the smoked word BYRON may or may not commemorate a visit by the famous English poet. With many names and inscriptions of the 1700s and even more later ones, the cave is a book of history. But the graffiti is so bad that a selective cave restoration project is badly needed, leaving only those which are truly historic: pre-1800, kings and queens, and perhaps poets.

Many large stalactites show recent breakage consistent with hand grenade damage and the guide told me that several were thrown in during World War II just in case Greek partisans were hiding there. I had been told that all of the beauty of the cave had been destroyed by German soldiers during World War II but this is not true. There is also some obviously older breakage and the primary marring of the cave is by smoke and graffiti. It is still beautiful despite all that man has done.

The geology of the site is intricate, with evidence of much metamorphism and some reverse metamorphism. The bedding is vertical to steeply dipping. From the back of the entrance room the cave plunges down the dip, widening along the strike. Spelogenesis by rising acidic thermal waters is a possibility.

The daily return flight from Paros to Athens occurs before the first ferry leaves Andiparos. Thus for our last night the choice was to overnight on Paros or to order a special water taxi at dawn at considerable expense. We chose the former and prowled the narrow streets and narrower lanes of old Parikia on Paros before turning in. The next day in Athens we picked up Mme. Petrochilou at her apartment, dumped our bags at the hotel, and then looked for another taxi for Koutouki Cave. Almost at once Anna spotted one driven by an old caving companion and we were off very happily through the chaos of Athens traffic. Forty-five minutes later we were at the cave half way up the mountain, somewhat less happily with the radiator boiling. The water pump or something gave out on the way back and the driver had to abandon us at a bus stop.

But we greatly enjoyed the cave. It was rather like Luray but with the sharpness of Luray's lines blurred a bit. And no graffiti. Anna did the tour in grand style, both in Greek and in French, with obvious pride in showing us the 38-meter vertical flowstone pitch below the tight natural entrance.

After a vigorous introduction to Athens' busses, she showed me the impressive little clubroom of the Hellenic Speleological Society at 11 Mantzarou Street behind the University. Everyone planning to go to Greece would do well to telephone there between 7 - 9 pm on a Wednesday evening, taking into account time zones and different dates for changing to daylight savings time in Europe. The number is (01) 36-17-824 and an English-speaking person can usually be found.

With just one more day in Greece, we elected to spend the morning undergoing further cultural shock at the National Archeological Museum. After lunch we prowled the limestone environs of the Acropolis and it paid off. We never learned how to get permission to visit the Grotto of Pan but the Cell of Socrates turned out to be an enlarged natural grotto on the Hill of the Muses (Filopapou Hill) facing the Acropolis. On the nearby marble knob called the Areopagus, where natural pulpits served such orators as Demosthenes and St. Paul, and on the Pnyx, just across the street, we found arched grottoes whose deep-smoked ceilings attested to centuries of shelter for all the famous Athenians whose names we remember 25 centuries later.

Though the sporting caves of Greece lie well to the north, where limestone thicknesses are measured in hundreds of meters, our short one-week trip revealed that to today's caver, the caves of Greece make the roots of our culture seem close indeed.

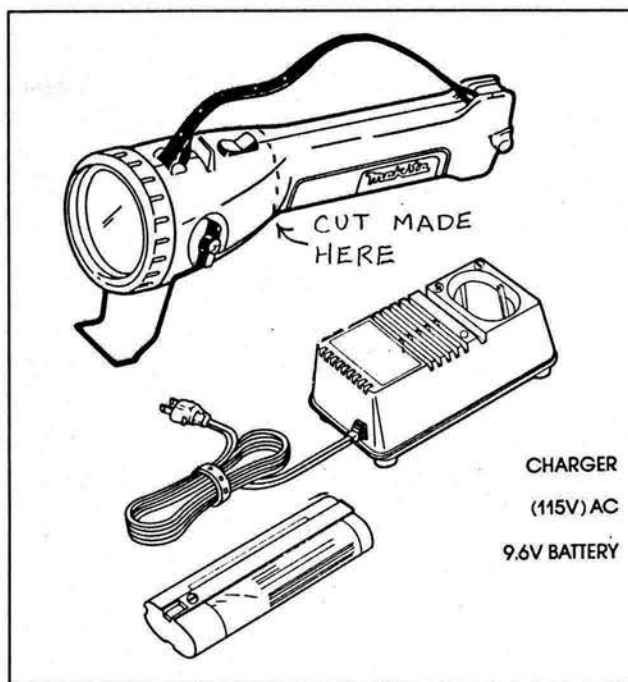
## Twice the light for half the cost!

By Steve Sprague

People that know me will tell you I have two amusing quirks (most people have more than two so stop sniggering). Quirk number one is my affinity for multipurpose gadgets. I think psychologists call it the Swiss Army Knife syndrome. Some people have the mistaken idea that a tool should do one thing and do it well. You know, the ones that throw a conniption if they don't have a left handed cork screw to open their Australian wine. Just about everyone knows that the proper way to open Australian wine is to break the bottle neck on the nearest solid object just prior to imbibing.

Quirk number two is my insistence on saving a penny, even if it costs a dollar to do so. Enough said on that count.

Makita Power Tools were thinking of me when they designed a line of battery powered tools that use the same 9.6 volt battery and charger. I innocently bought a cordless drill unaware that I was now in their control. (As a plug for Makita tools let me say that all three battery powered tools I own perform as well



or better than corded counterparts I have used.) When I found a flashlight that works with the 9.6 volt system I started thinking that it could be adapted for caving.

Their model ML900 flashlight projected an even light that rivaled a carbide light for lack of those disturbing concentric rings that plague most electric lights. There is a focusing knob that adjusts the light from a intense spot to a more even, carbide like light. Makita claims 230 candle power for the spot and I'd say its all of that. The knob moves a fresnel lens around the bulb to create an even light that is brighter around the edges than the spot. The lens is 2 3/4 inches in diameter and is held in place with a knurled threaded ring. When the ring is removed the mirror and lens come out as a unit and you gain access to a spare bulb stored in the housing. A good quality, sealed rocker switch is mounted on the top of the flashlight near the lens.

There were two problems to overcome in modifying the light to fit a caving helmet. One was detaching the lamp section with the controls of the flashlight from the battery section to create a helmet mountable light. The light is designed in such a way that this is a straightforward operation. A Dremel tool with a small circular saw and grinder works well for this. An L-1 clip was pop riveted to the back of the light. An aluminum reinforcing plate was necessary to strengthen the back of the light. The contacts that normally connected directly to the battery were modified and lamp cord was soldered to them. I sealed everything with silicon to keep out dirt and discourage moisture. The lamp was inverted so the switch faced downward and the profile on the hard hat

**Basic Version:**

Makita flashlight	\$24.99	Costco
Battery	\$24.95	"
Makita battery holster	\$4.95	Tool Town
Holster strap	\$3.25	Leather shop:
Wire	\$0.90	Hardware store
Hobbyist battery adapter	\$2.95	Pay n' Pack
L-1 clip	\$1.35	Bob & Bob
	<u>\$63.34</u>	

**Add for Deluxe Version**

Makita car charger	\$35.00	Costco
Battery, spare	\$24.95	Costco
Battery belt	\$8.50	Speleo Shoppe
Custom battery holster	\$15.00	Leather shop
	<u>\$83.45</u>	

**Cost of parts**

would be lower to minimize unexpected contact with low ceilings. The headlight now weighs in at a very light seven ounces.

The other problem was coming up with a new set of battery contacts to replace the ones destroyed when the light was sawed in half. I considered a number of options but they all seemed to require an inordinate amount of fabrication time. I finally ran across the solution by luck. The more expensive radio controlled cars use an identically-shaped battery of lower voltage and I ran across an adapter cap with terminals that fit the battery perfectly.

Makita makes a holster for a spare battery to be carried on a workman's tool belt. I added a strap to keep the battery and cap in place and the caving light was complete.

A wide belt is needed to carry the battery on the waist. The cheapest method (If you don't already have a belt) is to buy a Fastex buckle and 2 inch nylon webbing at REI. I ended up buying a battery belt from the Speleo Shoppe because I thought I'd get a better belt, but the Fastex version works well too.

Note the table of parts and costs. My time is included, probably about 4 hours of dinking around plus who-knows-what in errands for miscellaneous parts.

The Speleo Shoppe lists a Speleo Technics system similar to the basic system above at \$142.00 plus shipping in the 1989 price list. The 12 volt car charger for that system is an additional \$32.00. A Wheat lamp in the same catalog with a wall-plug charger is \$127.00 but its mobile 12 volt charger is \$116.00.

If you own a Makita tool then you already have the batteries and a 110 volt charger, so the only major outlay is the flashlight itself. I thought the car charger

would be a necessity for weekend trips so I bought one of those and I now use it more than my other charger at work. Another big advantage is both the 12 volt and 110 volt chargers fully charge the battery in about an hour. They have a LED that glows when the battery is charging. When it's off you have a fully charged battery (or you just forgot to plug the charger in). Most of the other commercial charging systems the charging time is as long or longer than the run time of the light.

There are some disadvantages to the system that limit its caving use. Makita claims the light lasts "up to two hours of continuous use per charge" which might be a little on the high side. The batteries are about half the size and mass of a Speleo Technics battery so carrying extras isn't such a big deal. Although the Speleo Technics provide 10 hours of light per charge, replacement batteries cost about 3 times as much and must be ordered from a caving supplier. Most caving trips in Washington are under two hours duration so a couple of batteries would be sufficient on a trip.

Replacement bulbs are expensive (about \$4.25) and can only be bought at a Makita outlet, but there are getting to be a lot of outlets around.

The setup is not as rugged as a commercial caving light system, but it is still pretty tough and lends itself to field repairs if necessary.

Is It Worth It? The main reason for expending all this energy was the high quality of the light generated by the flashlight. One reason I use a carbide light is I've never been able to adjust to the uneven quality of the electric lamps I've used. Even the expensive Speleo Technics and Wheat lamps I've seen don't have the even light the Makita produces. I haven't yet been able to compare other lights side by side with this one but I don't think they are nearly as bright and we all know what the black walls of a lava tube do to the feeble photons emitting from our puny little head lamps. The more light the better!

One note of caution, the power tools are such neat gadgets that you will probably end up owning a couple, which won't happen to you if you buy a Speleo Technics or a Wheat lamp.