

The 'Mission Statement' as shown here was established during the U.I.S. Congress in Switzerland. It is still valid. But at times maybe minor changes take place:

- current policy: 'commission members' are all those who actively participate in speleology in caves of volcanic origin and mention their interest to the commission. Just before a symposium this can be many of the organizers, later this often diminishes.

This means there is NO fixed membership-list. Changes of addresses take continuously place, mentioned in the N.L.

MISSION STATEMENT

of the UIS Commission on Volcanic Caves

The Commission on Volcanic Caves is an integral unit of the International Union of Speleology and upholds the high standards of its parent organization. It meets during international congresses of speleology, during international and regional symposia and all appropriate occasions. It solicits and approves sites for such symposia, held to date in the USA (2x), USA-Hawaii, Italy (3x), Japan, Spain (Canary Islands) and Kenya.

The basic mission of the Commission is to advance the scientific exploration, study, and preservation of lava tube caves and related features in volcanic rock, throughout the world. It seeks to bring together all persons, organizations, and agencies with legitimate concerns with volcanic caves, their features, and their environments. Its members are leading vulcano-speleologists from each country or area with especially important lava tube caves or related figures. Members are expected to keep the Commission informed about progress and problems in vulcano-speleology and to disseminate vulcano-speleological information to other speleologists in their country or study area.

The Commission collects and disseminates information through its Newsletter, through sponsorship of internal symposia and conferences and through exchange visits, through meetings of its Chairman/President with individual Commission members and cooperators, and through data compilation in a world data base on lava tube caves at Arizona State University (USA). Currently this world data base contains information on more than 2000 lava tube caves in 40 countries. Further, the Commission provides reports and recommendations to national and regional organizations as the American Geological Institute. Its Newsletter is published at least two or three times each year. In addition to current information it contains reports and abstracts. It is archived at two U.S. Geological Survey libraries, in the UIS library (Switzerland) and is abstracted in Volcano Quarterly.

The Commission intends to continue and expand all current projects. Especially it intends to expand its cooperation (as requested by the UIS Committee during the XII-th International Congress of Speleology in Switzerland - 1997) with other Commissions and Working Groups of the International Union of Speleology and with national and regional speleological organizations working in the field of vulcano-speleology.

International Union of Speleology Union Internationale de Spéléologie

Commission on Volcanic Caves



August 2008

52

This Newsletter is send free to members
of the Commission, and others who are
interested in lava-tube caves.
It is not possible to subscribe – but news
and information are always appreciated ...!

Honorary President: Dr. W.R. 'Bill' Halliday
wrhbna@bellsouth.net

Web-master: John Pint
ranchopint@yahoo.com
www.vulcanospeleology.org

Chairman & editorial address: J.P. van der Pas
Vauwerhofweg 3
6333 CB SCHIMMERT
Netherlands
jpgvanderpas@hetnet.nl



The logo of the commission is
a design by Conny Spelbrink,
introduced for the symposium
on the Canary Islands (1994).
She gave the approval to use
this for the commission.

New and/or changed mail addresses

Dr. Pedro Oromí
Depto. Biología Animal
Universidad de La Laguna
38206 La Laguna
Tenerife – Canary Islands
SPAIN

Dr. Joao Paulo Constancia
“Amigos dos Acores” -
Environmental NG
Av.da Paz, 14
9600 – 053 PICO DA PEDRA
AZORES –
PORTUGAL

Bjorn Hroarsson
Gradnikova, 1
1000 Ljubjana
SLOVENIA

Ed & Haley Waters
Hilltop House
Windwhistle Lane
West Grimstead
Salisbury
Wiltshire SP5 3RG
U.K.

Dr. Tsutomu HONDA
Batiment-A
Les Gemeaux
5, Avenue de la Cible
13100 Aix-en-Provence
FRANCE

Prof. dr. Ahmad Al-Malabeh
Hashemite University, Zarka
Queen Rajna Institute of
Tourism and Heritage
P.O. Box 150 459
13115 ZARKA
JORDAN

ANNOUNCEMENT FROM AMCS

The Association for Mexican Cave Studies announces the publication of its bulletin 19, "Proceedings of the X, XI, and XII International Symposia on Vulcanospeleology", edited by Ramón Espinasa and John Pint. 305 pages plus CD, softbound. US\$ 15

The XII symposium was held in Mexico in 2006. This volume contains the abstracts, 18 papers, and the field-trip guidebook for that symposium.

Since the proceedings for the previous two symposia in the series had never been published, we have included all the abstracts and a total of 12 papers from the 2002 and 2004 meetings. The book is accompanied by a CD that contains a PDF file of the bulletin, with color illustrations where available, and also supplementary material submitted by some of the authors. Further information, including a table of contents at

< www.amcs-pubs.org/bul/bul19.html >

Order for US\$ 15 plus US\$ 3 for US postage from AMCS, PO Box 7672, Austin, Texas 78737 (USA). Information about PayPal payment for e-mail orders or foreign postage is at

< <http://www.amcs-pubs.org/order.html> >

(People who were registered full-time for the 2006 symposium will receive free copies from the AMCS as its contribution to the event)



Proceedings of THREE symposia in ONE book !

This publication, edited by Ramón Espinansa-Pereña and John Pint is really a bible about abstracts and lectures on vulcanospeleology.

John Pint (and some others) asked for the still not seen proceedings of the Iceland 2002 symposium. Reasons were lost documents, participants who never send their lecture and so on. So John started to collect lectures, pushed people around, and kept collecting material.

It was decided to include the Azores proceedings in print, and of course the main part are the proceedings of the Mexico 2006 symposium.

The result is a book of 305 pages, size 28x21½ cm, 2 cm thick, weight 900 grams (around 2 lbs).

Iceland 2002 is on the pages 11 - 63, Azores 2004 on pages 65 - 131, and Mexico 2006 on pages 133-305.

Than as bonus a CD with additional material, as posters in color.

Congratulations for Ramón, John and Bill Mixon.

New Publication:

Mt. Suswa Lava Caves, KENYA

This publication ('A project to map and review the tourism potential of Mt. Suswa's principal cave group') is # 31 of the Berliner Höhlenkundliche Berichte (Berlin 2008).

Editor Dave Checkley, and some well-known participants as Chris Wood and Jim Simons.

The contents: introduction, mapping the caves, developing the caves, proposed programme of engineering, narrative for future cave tours and a long list of references.

Size A-4, 50 pages, 47 color pictures, 6 maps.
Weight 170 gram,
ISSN 1617-8572

Available from: Michael Laumanns
Unter den Eichen 4c
15834 Rangsdorf - Germany
Michael.Laumanns@bmf.bund.de

This is a very welcome addition to publications about Kenya, and specially Mt. Suswa. More in:
International Journal of Speleology, Volume 27B (1-4), 1998 (proceedings of the 8th International Symposium on Vulcanospeleology - ISSN 0392-6672), and
Volcanic Caves of Kenya – 'a guide for the 8th I.S. on Vulcanospeleology' by Jim Simons, Nairobi, February 1998.

Publications and Articles

Newsletter Hawai'i Speleological Survey, Spring 2008, Number 23. A double-size issue, 50 pages, printed version in b/w, in color as PDF document. Some 12 articles, 35 maps.
In the editors column it is reported Gerald Favre, Switzerland, works on a lava-tube film.
Editor Bob Richards, < bob@cavegraphics.com >

Article in NSS News May 2008 by John Pint: 'The Caves of Shuwaymis' in Saudi Arabia. 6 pages of adventure and discoveries, 16 b/w pictures, two maps. He ends with the remark: '... and where air reconnaissance indicates that at least 39 more lava tubes – up to 50 kilometers long – are awaiting to be explored'.
More on < www.saudicaves.com >

Article 'Um Verndun og Vardveislu Íslenskra Hraunhella' by Árni Stefánsson in Náttúrufræðingurinn 76 (3-4), p. 121-131, 2008. In Icelandic, but with English summery, 11 pages and 12 color pictures. Árni is very concerned about the "...serious and ongoing damage to sensitive formations in Icelandic lava caves". He discusses damage done, lack of protection, the issuing of locations of sensitive caves. A long list of references. He gives some suggestions, but also states clearly '...the authorities have limited knowledge of caves and are overloaded with other "more important issues"'.
Note by editor (J.P. van der Pas): Chris Wood published in 2001 a report about new discovered lava tube caves in the Laufbalavatn Cave Area (Skaftáreldarhraun). An area where not many people go. A visit this year (2008) showed there is now a well marked track (with signs hellar =caves), a parking/picnic place and a big sign with the GPS data of the caves.

Catalogue of cavities from the Canary Islands with more than 1000 m
Updating for the UIS Commission on Volcanic Caves

J.P. van der PAS

Octavio Fernández¹ & Pedro Oromí²

1: GE Tebexcorade – La Palma, Apdo. nº 591, 38700, S/C de La Palma. octavio.fl@canarias.org

2: GIET Dpto. Biología Animal, Universidad de La Laguna. 38206, La Laguna. poromi@ull.es

Development: total length additionning all branches. Legitimation: club, author or publication which certifies the data.

#	Cavity	Code	Devel	Legitimation	
Tenerife	1	Viento-Sobrado system	-	17032 m	Catálogo Espeleológico (henceforth "CE") de Tenerife
	2	C. de Felipe Reventón	--	± 3000 m (1845 m surveyed)	CE de Tenerife
	3	C. de San Marcos	--	1820 m	CE de Tenerife
	4	C. del Parque de La Granja	--	> 1375 m	GET Benisahare
	5	C. de Chiguergue	--	> 1000 m	CE de Tenerife
La Palma	6	Sistema de Tigalate, tubo A	LP/MZ-01	1632 m	GE Tebexcorade – La Palma
	7	C. Honda del Bejenado	LP/EP-01	1363 m	GE Tebexcorade – La Palma
	8	C. del Perdido	LP/TZ-02	1288 m	GE Tebexcorade – La Palma
	9	C. Honda de Miranda	LP/BA-03	1006 m	GE Tebexcorade – La Palma
Lanzarote	10	C. del Llano de Los Caños	LP/MZ-04	> 1000 m	GE Tebexcorade – La Palma
	11	C. de Los Verdes	LZ/HR-02	6100 m	GES-CMB
	12	Túnel de La Atlántida	LZ/HR-05	1726 m	Expedición Túnel Atlántida 1992
	13	C. de Los Naturalistas	LZ/TS-01	1640 m	GIET
	14	C. Perdida o Escondida	LZ/YZ-33	1176 m	J.L. Martín (unpublished)
El Hierro	15	C. de Don Justo	--	6315 m	J. Montoriol <i>et al.</i>

10th International Symposium on
Pseudokarst
 Gorizia – Italy – 29April/2May 2008

This symposium was held in Gorizia, a town some 100 km's north of Trieste. Participants from some 10 countries, half of this people came from Italy, but ranged as far as Russia and Iran.

Actually three days, but first half day was the opening in a very impressive medieval castle.

Than the lectures, which ranged from 'deepest cave of the world in quartzite' in Brazil (670 meters) by Dr. Soraya Ayub, to 'short term micro-morphology changes on sandstones' by Dr. Cucchi.

The field trip showed us the Villanova Cave, a cave between limestone and schist and apparently showing some geological features to complicated for this participant.

The Commission on Pseudokarst has been established by U.I.S., but actually existed already for years under supervision of Prof. Jiri Kopecky. Than Istvan Eszterhas took over, and brought this commission to one of the best of U.I.S. Now, regrettable, due to some health problems, he stopped as president. Of course, due to the immense work he did, he was immediately nominated as honorary president (as Jiri before).

So now congratulations to the new president, Dr. Jan Urban from Poland.

He can start with a healthy commission, and future of this commission is bright:

- next symposium (by H. Simmert) will be in Königstein – Germany 12/16 May 2010.
- proposal for 2012 (by Mrs M. Vodovets – VSEGEI), could be in St. Petersburg (Russia).
- proposal for 2014 (by Dr. Afrasibian, Iran Karst Research Center) in Iran.

Address of the new president

Dr. Jan Urban
 Institute of Nature Conservation
 Polish Academy of Sciences urban@iop.krakow.pl
 al A. Mickiewicza 33
 31 – 120 Kraków
 POLAND

References:

- ANONYMOUS. 1998. Informe sobre el tubo volcánico recientemente aparecido en Santa Cruz de Tenerife. Unpublished report deposited at Museo de la Naturaleza y el Hombre, Santa Cruz de Tenerife, on november 12th, 1998.
- J.J. HERNÁNDEZ, P. OROMÍ, A. LAINEZ, G. ORTEGA, A.E. PÉREZ, J.S. LÓPEZ, A.L. MEDINA, I. IZQUIERDO, L. SALA, N. ZURITA, M. ROSALES, F. PÉREZ & J.L. MARTÍN. 1995. *Catálogo Espeleológico de Tenerife*. Cabildo de Tenerife, Santa Cruz de Tenerife. 168 pp.
- FERNÁNDEZ, O. 2007. Avance global del Catálogo de Cavidades de La Palma (II). (islas Canarias). *Vulcania*, 8: 79-86.
- GUTIÉRREZ, F.J. & FERNÁNDEZ, O. 2003. Avance global del Catálogo de Cavidades de Lanzarote (islas Canarias). *Vulcania*, 6: 55-59.
- MARTÍN, J.L. & M. DÍAZ. 1985. El tubo volcánico de los Naturalistas (Lanzarote Islas Canarias). *Lapias*, 13: 51-53.
- MONTORIOL POUSS, J., ROMERO, M., MONTSERRAT i NEBOT, A. 1980. Estudio vulcanoespeleológico de la Cueva de Don Justo (Isla del Hierro, Canarias). *Speleon*, 25: 83-91.
- MONTSERRAT NEBOT, A. 1977. Contribución al conocimiento vulcanoespeleológico de la isla de Tenerife (Islas Canarias): La Cueva de San Marcos. *Speleon*, 23: 93-102.

Abstract presented at the meeting of the Cordilleran and Rocky Mountain Sections of the Geological Society of America and associated societies.

Las Vegas, Nevada
19 – 21 March 2008

DIFFERENTIATING LAVA TUBE SKYLIGHTS FROM PIT CRATERS; A STUDY OF THE CAVE-LIKE STRUCTURES ON ARSIA MONS, MARS

HALLIDAY, William R., Commission on Volcanic Caves, International Union of Speleology, 6530 Cornwall Court, Nashville, TN 37205, wrhbna@bellsouth.net

WYNNE, J. Judson, Department of Biological Sciences and Merriam-Powell Center for Environmental Research, Northern Arizona University, Flagstaff, AZ 86011

We propose the cave-like structures recently identified on Mars are actually pit craters, rather than “cave skylights” as they were initially described. Our conclusions are drawn by comparing the structural characteristics of Earth-analogue pit craters to the Arsia Mons features. On Earth, differentiating lava tube skylights from pit craters in the 100-250 meter width range using remote sensing imagery is often easy and accurate. Several relevant factors include width, depth, shape and multiplicity. The widest recorded terrestrial lava tube has a passage width of about 50 meter and most are much narrower; confluent collapse of adjacent passages theoretically might reach widths of 100 meter but such confluent sinks lack the circularity of pit craters. Further, whereas all documented terrestrial pit craters in the 100-250 meter range are shaft features more than 30 meter in depth, the deepest known terrestrial lava tube cave is less than 30 meter deep and their skylights and other associated collapse features are even shallower. Pit craters rarely occur in closely spaced groups, and each pit crater in such groups maintains its characteristic near circular shape from a nadir-viewing perspective, and retains a shaft-like interior structure.

In contrast, skylights commonly occur together with other, readily identifiable types of lava tube collapse features (e.g., irregularly shaped orifices, orifices elongated in the direction of flow, multiple orifices outlining complex patterns of braided lava tubes, and trench segments). Like terrestrial pit craters, the cave-like features on Arsia Mons, Mars (a) are spread out across the northern flank of this shield volcano, (b) are circular in nature, and (c) appear to be deep shafts based on the results of photogrammetry routines. While the Arsia Mons features are clearly the most compelling evidence for cave-like structures on the Red Planet, we conclude these features are pit craters and likely do not afford access to subterranean Mars.

A note and a request by Bill Halliday

Lava tube caves in Turkey?

Going through some old files, I found that on 8 October 1990 Dr. Trevi, minister of the Geological Survey of Israel told me he had seen entrances of lava tube caves in eastern Turkey from an Israeli tour bus on a well-travelled highway, north of Caldiran and south of Dogubayazit, and also south of Mt. Ararat. He also said there were volcanics in Hatay Province that might be worth checking out. Has anyone developed any information on these?

The Geological Society of America currently has a close-out sale at US\$ 5 per volume plus US\$ 5 shipping and handling for any given number of volumes, for a group of its “Special Papers”, SP 353 is included, and is of special interest to vulcanospeleologists. Title: Geology, hydrology, and environmental remediation: Idaho National Engineering and Environmental Laboratory, Eastern Snake River Plain, Idaho. Editors: Paul Karl Link and L.L. Mink.

There is nothing about lava tubes in this volume, though one of its diagrams strongly suggests their presence. However, at least one of its papers includes an excellent exposition of inflation of pahoehoe flow lobes, and two chapters cover features and development of volcanic crevices.