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Summer, 1979, No. 86

Jim Cundy. Alexandra Cave, Narracoorte S.A.

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EDITORIAL

In the past few months,I have seen several photographs taken by speleologists.The photographic techniques are excellent,but I am made a little uneasy by the pose of the person within these particular photographs (which were published within the caving fraternity).It would not be polite to tell you where.You must seek for yourself.

My concern is that the"bod"in each photograph is shown either recumbent upon,or grasping speleothems.One might say why the concern over such a small point. It is not a trivial matter !The ASF Code of Ethics says 'no touching', yet here is the case of ASF affiliated clubs doing just this. Clubs within ASF should have a 'noblesse oblige' attitude in regard to caving.They must present to the public and their fellows a 'Caesar's wife is above suspicion ' situation.

It's just not good enough.Those clubs lose the right to educate the public in caving ethics, as they do not make the grade themselves.Care must be taken to present, at all times , a responsible and deeply sensitive maturity.Not just a public face but a deep committment to these ethics, so the situation as noted above does not arise.One would automatically not dream of touching a speleothem ,let alone being photographed doing so.I am disappointed that these clubs did not forsee the problems that could arise.I hope that responsible speleologists will not place themselves in this situation in the future.

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DEADLINE DATES FOR FUTURE ISSUES - For numbers 87 ,88, and 89 are 1 st. March, 1 st. May and 1 st. August,1980, respectively.

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NOTICES & NEWS

VISITS TO BAT CLEFT , MT.ETNA,CENTRAL QUEENSLAND.

Jeff Simmons informs me that time is running out for a guided walk up Mt.Etna to see the exit of the bats at dusk. The season is almost over.If you are heading to Central Queensland soon,contact him on (079) 285798.

PADDY PALLIN FOUNDATION

Grants from the Paddy Pallin Foundation will be available in 1980. Submissions close 29th.February,1980. Grants are made for projects,in a diverse field,which 'were likely to produce the most good for the most people'. Any enquiries should be forwarded to :-

R.B.Pallin,
PADDY PALLIN FOUNDATION,
c/- 69 Liverpool Street,
SYDNEY,N.S.W.,2000.

HELICTITE

Helictite ,the Australasian Speleological Journal for over 15 years.Helictite publishes thoroughly researched and carefully written papers on caves and karst of Australasia.It is published twice yearly.For further details write to Speleological Research Council Ltd.,
P.O.Box 183,
Broadway,N.S.W.,2007.

CAVING BOOKS AVAILABLE

I have a circular cum catalogue from Anne Oldham in Wales,who is a caving bookseller, specializing in mail orders.I suggest you write for a catalogue if you are interested :-

Mrs.Anne Oldham,
Rhychydwr,
Crymmych,
Dyfed SA 41 3 RB United Kingdom

ASF COMMITTEE MEETING

To be held in Buchan ,Victoria,over the Australia Day Weekend in January,1980.Contact Lloyd Mill, and reserve accommodation at Homeleigh,for yourself and anyone else.

Lloyd Mill,
19 Regent Street,
Ascot Vale,Vic.,3032. (03) 370 6797.

CAVE CONVICT IS COMING !

The thirteenth bi-ennial conference of the ASF will be hosted by VSA and held in Melbourne.The conference will run from Saturday 27 th.December 1980 to Wednesday 31 st. December 1980, with field trips following in early January,1981. Lectures and seminars will be held at Pharmacy College and accommodation will be at International House ; both are in Parkville and close to each other.

It is the intention of the Cave Convict Committee to provide the best conference yet held,and, to help us in this task,your help is required.If you have any suggestions that you think will improve the conference,please send a note to the address below and your suggestions will receive full consideration.

Place the dates in your diary now.

Philip Mackey.
Address for correspondance: Cave Convict 1980,
P.O.Box 5425 CC,
G.P.O.,Melbourne,Vic.,3001.
Philip's home phone is (03) 7894386.

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KEMPSEY CAVES - A NEW CONSERVATION ISSUE

Glenn Pure

It was with horror that a UQSS member opened 'The Australian' in June this year...under Mining Notices,CRA Exploration advised that they were applying for exploration licences west of Kempsey ,in New South Wales.A hasty plot of their applications on our maps confirmed our worst suspicions that the licences followed the limestone belt west of Kempsey.All of the known 100 caves were included, as well as many unexplored, but potentially cavernous areas.One of the caves included is Willi Willi cave,which is a maternity site for a northern New South Wales population of eastern bent-wingedbats.The addition of Willi Willi cave to the threatened bat maternity sites, means that virtually every bent-winged bat maternity cave in Queensland and northern New South Wales is under threat of mining.What an atrocious situation!

In a letter from CRA Exploration, we were advised that the company was interested in the geological formations which occur beneath the limestone.Checks with the New South Wales Mines Department by Andrew Pavey in Sydney, showed that CRA were interested in Group I metals (these include gold,copper, lead etc.).CRA advised that their exploration would not result in any damage to the caves,nor did they intend denying access to the caves during exploration.However,details of the probability,nature and destruction of mining are not known at this juncture. It seems likely that if mining occurs,destruction of caves may occur owing to the proximity of the deposits of interest to the cavernous limestone.At the very least,mining will aesthetically do great harm to the area because of the noise and dust that would be inevitable,not to mention the fact that roads will be put into the rainforest destroying the wilderness of the area.Even the exploration will do damage as roads will have to be put into the rainforest for the drilling rigs.

A submission to the New South Wales Government Departments should be completed by the time this article goes to press.Rosie Shannon in Brisbane is doing a lot of the work.(Glenn is doing the writing as he knows the right words-Ed.)I am sure she would appreciate input in the form of comments or information.If anyone in Sydney is interested in helping,we will, from time to time, need information from the relevant New South Wales' Government Departments based in Sydney.Rosie or I would be most pleased to hear from anyone who would be in a position to obtain such information fairly quickly.

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MT. ETNA - SOME GOOD NEWS & BAD

Glenn Pure

Queensland cavers,with help from ASF, have been fighting a protracted conservation battle with the less than sympathetic Queensland Government,for about 17 years,over the limestone mining of the caves at Mt.Etna in Central Queensland.Mt.Etna is ironically just a few kilometres west of the tropical tourist site of Mr.Iwasaki at Yepoon, which stirred Australia-wide opposition from conservation interests.Amongst other things,Mt.Etna is probably the most densely cavernous limestone outcrop in Australia,with 46 caves in about 12 hectares.As well,Bat Cleft cave on Mt.Etna is the maternity site for the largest single population of cave bats in Australia-250,000 little bent winged bats and is a habitat for a major portion of the world's population of the extremely rare ghost bat.

We have been advised by the Federal Government's Australian Heritage Commission that Mt.Etna and nearby Limestone Ridge have been included in the Interim Register of the National Estate.Objections to the listing are still to be considered and we have been advised that the Queensland Government, as well as Central Queensland Cement (which is mining limestone at Mt.Etna), have lodged objections.

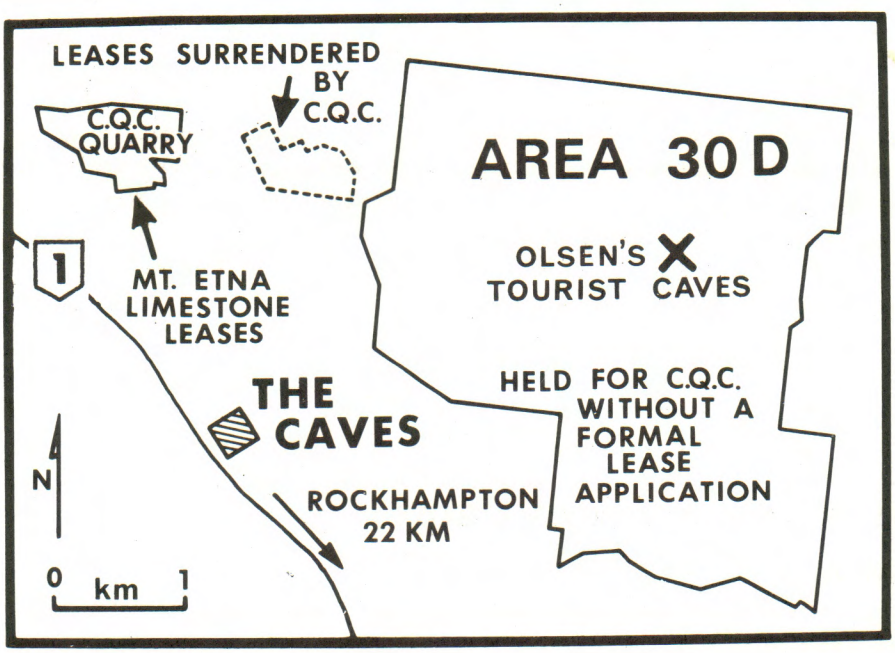
Even more good news is that the Queensland National Trust has listed Mt.Etna and Limestone Ridge as 'essential to the National Estate'.This is a major breakthrough because the National Trust is a fairly conservative organization and furthermore,Mt.Etna is one of the first natural areas they have listed-the Trust is normally associated with historic buildings etc.

Both the Federal Government's and the National Trust's listings will have tremendous political value for us, but whether or not this sways the Queensland Government remains to be seen.

Now for the bad news... a new threat of limestone mining exists to caves in the Mt.Etna area.In 1975,the Queensland Minister for Mines (Mr.R.Camm) made a detailed statement to Parliament on the Mt.Etna caves issue,and, in that statement, he announced that his department had negotiated for surrender of 30 hectares of leases on Limestone Ridge so that a national park could be gazetted over the Ridge.However, recently, the Queensland Mines

LIMESTONE MINING AT MT.ETNA (Cont.)

Department was contacted by us regarding the future of other cavernous limestone deposits to the east of Limestone Ridge.To our astonishment,we learnt that the Mines Department was holding these deposits, in Mines Department Area 30 D, in reserve for Central Queensland Cement Company.Further investigation led to an even more remarkable finding-these deposits in Area 30 D were being held for Central Queensland Cement Company because they surrended their Limestone Ridge leases.In other words, the Mines Department had completely negated their action in securing the protection of Limestone Ridge,by making a condition of the deal that CQC would be given other cave containing limestone deposits in return.



CQC came out of the deal quite well- they surrendered 30 hectares of leases and in return are having 874 hectares in Area 30 D held for their future use.Furthermore,competitors of CQC will be excluded from even exploring these limestone deposits as a result of the deal between CQC and the Mines Department.This company seems to be treated unusually well by the Queensland Government and has perhaps explained why we are having so much difficulty in trying to secure preservation of Mt.Etna and the other cavernous limestone deposits in the area.

We were even more frustrated when we learnt that the deposits in Area 30 D were being held for CQC without the Mines Department having ever received application for legal mining rights over the area.Apparently,the Mines Department felt that the legal dubiousness of this deal was outweighed by the advantage that holding the deposits without a formal mining application, meant that the normal procedures such as informing landowners and calling for public comment could be sidestepped!

The Queensland Mines Minister carefully avoids mentioning the fact that this deal was made.We only found out about the deal as the result of a slip on the part of an unsuspecting public servant in the Mines Department I'm sure.

Fortunately,several landowners with land in Area 30 D, are less than impressed with the Mines Department's dealing, and their pressure may help to avert a threat of mining occuring in this area.

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Australian Speleological Federation

CAVE & KARST NUMBERING CODE

Published December, 1979

Australian Speleological Federation
P.O. Box 388
Broadway, N.S.W. 2007

CAVE AND KARST NUMBERING CODE

Peter Matthews

Published 1979
Replaces numbering section of ASF Nomenclature Code 1968

Australian Speleological Federation
P.O. Box 388, Broadway, N.S.W. 2007

1. GENERAL

By numbering we mean the use of an alphanumeric code which enables identification of every karst feature in Australia by a unique combination of numbers and letters, while at the same time keeping such combinations as short as is reasonably possible for economy of space and time in recording, and also to facilitate memorising them.

This Code of Practice formalises existing Australian methods, and at the same time, establishes practical and necessary limits to facilitate the systematic registration, consolidation and retrieval of cave data from throughout Australia.

In the material which follows, the word "cave" should be taken to include karst feature also, except where the intention is clearly otherwise.

2. STABILITY

As well as being a means of avoiding the unnecessary proliferation of cave names, the prime purpose of numbering is to provide an identification which is *systematic, unique* and *permanent*.

It is these last two properties which enable continuing unambiguous reference to any one cave in scientific or other literature over an indefinitely extended time span. The achievement of this objective requires a well organised approach to numbering at the State level and long-term dedication from individual cave numberers.

Rule 1: Once assigned, the number of a cave should never be changed.

Rule 2: Every effort should be made to allocate a number prior to publication of a cave's details.

Rule 3: Within one area, one specific *person* (not group) should be responsible for all number allocations. (See also Sections 5 and 6.4.)

Rule 4: The position of Cave Numberer should be a stable one, not subject to regular re-election, but subject to continued satisfactory performance.

Rule 5: Each State should establish suitable numbering arrangements for its caves. This should include the definition of areas, assignment of unique area codes, and appointment of a specific person as Cave Numberer to each area. These arrangements, and any changes to them from time to time, should be published in an established periodical with a wide circulation such as the *ASF Newsletter*.

3. STRUCTURE OF NUMBER

Rule 6: The structure of a cave number should be as follows:

State code	Area code	Serial no.	Feature type

where

State code	is	1	numeric	character
Area code	is up to	3	alphabetic	characters
Serial number	is up to	4	numeric	characters
Feature type	is	1	alphabetic	character

and

3. STRUCTURE OF NUMBER (Cont.)

Rule 6: (Cont.) No serial number repeats within its area code. No area code repeats within its State code.

In normal usage the cave number may be abbreviated to just the area code and serial number unless ambiguity could result.

The remainder of this Section describes how each of the four components of a cave number should be built up.

3.1 State code

The purpose of the State code is to identify the State where the cave is located and to permit independence between area codes in different States.

Rule 7: The State code should be selected from the following numbers, which, with the exception of Northern Territory, are derived from the postcode.

2 - N.S.W. and A.C.T.
3 - Victoria
4 - Queensland
5 - South Australia
6 - Western Australia
7 - Tasmania
8 - Northern Territory

3.2 Area code

The purpose of the area code is to identify the area where the cave is located and to permit independence between serial numbers in different areas.

Rule 8: The letter(s) chosen for the area code should bear a close relationship to the name of the area, be as few as possible, and make no distinction between upper and lower case. The use of numbers or the letters I and O within the area code should be avoided to aid quick and accurate interpretation of the cave number. The use of X and Z should also be avoided because they may be performing a special function as described later.

Area code examples: B for Bungonia, MC for Mole Creek.

An area will normally fall into one of three categories - localised, large tract, or background. Each of these is discussed below.

3.2.1 Localised area

This is the type most commonly encountered: an outcrop, or series of outcrops, forms a natural grouping with a natural name and a manageable size; the area boundary is conveniently defined as the limits of that outcrop or deposit, and it is assigned an individual area code.

3.2.2 Large tract area

Where the host rock forms a large continuous tract it may be more convenient to subdivide it into several more manageable "areas", each with a separate area code. If so, the following should be observed:

Rule 9: A subdividing boundary in a large tract area should conform to the following:

1. It should if possible form a natural division.
2. It should be clearly definable, and locatable on the ground.
3. Any visible feature used as a boundary should be chosen with regard for its permanence of location.
4. It should not be crossed, nor likely to be crossed, by any cave system.

3.2.2
Large tract area (Cont.)

Comments

1. Surface divides can be unsatisfactory boundaries in karst areas because they are not infrequently crossed by underground drainage and karst systems.
2. Arbitrary straight lines on maps may be extremely difficult to locate on the ground in sparsely featured country. Local government boundaries may be useful as they are fairly permanent and reasonably locatable on the ground.
3. Boundary lines which get shifted, e.g. road re-alignment, can cause anomolous cave numbers. On the other hand, it is not really a serious problem if there is a small overlap in areas of poor definition so long as each cave has a clear and permanent physical identification and its location is unambiguously recorded.
4. Rivers and streams can form good boundary lines because they are permanent, easily locatable on maps, aerial photographs and on the ground, and are rarely crossed by cave systems. For example, in Austria this is the principal method used; it also happens to neatly divide up their different cave bug communities.

3.2.3
Background area

A background area is a catch-all area to accommodate isolated caves of all kinds which do not fall into nor warrant their own area designation. This typically includes boulder caves, rock shelters, sea caves, tectonic caves, and isolated karst caves.

Rule 10: The whole of each State should be divided into suitable background areas to accommodate isolated caves of all kinds which do not fall into specific cave areas. Each such background area should have its own area code assigned, preferably starting with the letter Z. The Z serves to distinguish the area code as a background one and to cause all such area codes to come together naturally at the end of any ordered listing of a State's caves.

Examples

1. VIC has divided the State into four natural areas defined by visible boundaries to cater for isolated caves.
2. NSW groups all such caves into the respective 1:250 000 topographic map sheet, each sheet representing one "area".
3. In both WA and SA, where surface features are virtually non-existent over large areas, a single area designation has been used to cover all caves not in existing local areas.

Comments

1. As most of these caves are widely scattered non-karst, it becomes more acceptable to use surface divides as boundaries, especially in view of their permanence and usually their locatability on the ground.
2. Where there are sufficient surface features to allow reasonable location of sheet boundaries on the ground, the topographic map sheet method can be useful. The particular map series chosen would be determined primarily by the suitability of its scale to the circumstances. The three eligible series would be 1:1 000 000, 1:250 000, and possibly 1:100 000.

3.2.3 Background area (Cont.)

Rule 11: If the map sheet method is used for background areas the following should be observed.

1. The one map series should be used for the whole State.
2. The area code letters should be derived from the name of the map sheet but should start with the letter Z as described above.

3.3 Serial number

The purpose of the serial number is to distinguish between different caves in the one area.

Rule 12: The allocation of serial numbers should be solely on the basis that the next cave to qualify for a number gets the next number in the series, not on factors such as order of discovery nor physical position.

Rule 13: Karst features which it is desired to identify and record should be allocated a serial number from the same number series as the caves. However note also the possibilities under Section 6.3 Hierarchical grouping of features.

Comments

1. Location-derived serial numbers pre-empt any decision to suppress a cave's location, can have resolution problems with close caves, and make it harder to prevent duplication. Any locating function in the cave number is best left to the area and State codes.
2. If a significant doline has a cave leading off it, it is quite permissable to allocate separate numbers to both the doline and the cave. The same applies to similar situations with other karst features.

3.4 Feature type

The purpose of the feature type component is to distinguish cave numbers from karst feature numbers and at the same time is a concise way of stating the type of karst feature.

Rule 14: For karst feature numbers, the feature type letter should be selected from the following:

E - entrance
A - arch
B - bridge
V - blind valley
Y - cenote
D - doline
H - hole (impenetrable)
C - karst cone or tower
W - karst window
P - polje
R - rising
S - streamsink
T - tufa or travertine
U - uvala
M - misc. feature

Rule 15: In the case of a combined cave and karst feature, if separate numbers are not warranted then the cave should take precedence. For example, the classification of "rising" should only be used where it is not enterable.

Rule 16: If a numbered karst feature later becomes a cave, and separate numbers are not warranted, then the feature number should be converted into a cave number by dropping the feature letter but retaining the original serial number for continuity of reference.
Example: Rising B-38R becomes cave B-38 if dug out.

4.
QUALIFICATION FOR BEING NUMBERED

In view of the importance of avoiding mistakes in numbering, certain minimum criteria should be met.

Rule 17: Before a new number is allocated, the Cave Numberer should be satisfied that:

1. The cave does not already have a number.
2. The *recorded* location details are sufficient to find the cave again *and* to distinguish it from any nearby caves.
3. A description of the currently known extent of the cave is *recorded*.

Rule 18: In the following cases it is *essential* that the number be marked at the cave entrance at the same time as it is allocated:

1. If the cave is in featureless country where relocation could be difficult.
2. If more than one person carries out numbering in the same area.

In other cases every effort should be made to mark the cave entrance at the same time as the number is allocated, otherwise, as soon as possible thereafter.

Rule 19: No new number should be allocated, alluded to, nor recorded in any report by any person until confirmed by the recognised Cave Numberer or a deputy specifically appointed by him.

Comment

The problem being avoided by Rule 19 is where somebody guesses at the next number and it gets into print, whereas the Cave Numberer may have already allocated that number to something else. The situation is virtually impossible to recover.

5.
TEMPORARY NUMBERS

Rule 20: If there is an unavoidable delay in allocating a permanent number, *and* there is a real need for some form of temporary identification in the absence of a name, then a temporary number may be allocated and should conform to the following:

1. The temporary number should take the same form as a normal number except that the serial number should be taken from the series X1 - X999, where the leading alphabetic X clearly distinguishes it from a normal number. Note that the total serial number is still to contain a maximum of only four characters.
2. Temporary numbers should be administered by someone other than the normal Cave Numberer for the area so that the numbers can fulfil their function as an emergency measure when the normal Numberer is temporarily unavailable.
3. A temporary number may be allocated without regard to whether the cave already has a permanent number if the existence or identity of any permanent number cannot readily be established.
4. No temporary number should be reused in an area.
5. A cave's permanent number should be allocated at the earliest possible time, preferably before the cave gets into the literature.

5.
TEMPORARY NUMBERS (Cont.)

Rule 20: (Cont.) 6. In any listing of an area's caves, all temporary numbers ever allocated should always continue to be listed, with all cancelled ones simply referring back to the relevant permanent number. Temporary numbers should therefore be used sparingly.

Comment

The leading X in the serial number, besides identifying it as a temporary number, will also cause all temporary numbers to group together naturally after all the permanent numbers in any ordered listing of the area's caves.

6.
SPECIAL CASES

6.1
Multi-entrance caves

In the field it is obviously the cave entrance which is the landmark indicating the existence of an enterable cave; whether or not it is leading to the same cave as other entrances is usually not obvious. It is therefore the entrance which must be distinguished and identified by an individual number in the field. On the other hand the real object of our interest is the cave, and the number of entrances it has is largely incidental. We therefore also need a definite number by which to refer to the one cave in reports and in the literature, and under which to file all information on that cave, rather than have it scattered through an indeterminate number of places.

Rule 21: When a cave has multiple entrances, all accessible and significant entrances should be allocated separate numbers and physically identified. The numerically lowest number should be regarded as the cave number, and all other numbers regarded only as entrance numbers.

Where a cluster of intervisible entrances obviously lead into the same cave, only one entrance of the cluster needs to be numbered.

6.2
Separate caves later joining

When two caves become joined, then we have the situation of a single multi-entrance cave.

Rule 22: When independently numbered and apparently separate caves become joined, the lower number should then be regarded as the cave number for the enlarged cave, and the higher number should be regarded as an entrance number.

Note that no serial numbers should be cancelled or changed, but that the higher number should acquire the feature type E. All numbers should continue to appear in any cave listing, but in their new role and with the cross-referencing appropriately changed.

Comment

In the case of an important well-known cave joining with an insignificant cave of lower number, then Rule 22 should still apply and the combined cave be known under the lower number. However this does not mean to say that the cave *names* should be treated likewise - obviously there may be the need to retain in some way the use of the well-known name. One obvious possibility of course is to extend the well-known name to cover the whole of the enlarged cave.

6.2 Separate caves later joining (Cont.)

Where both caves carry well-known names the decisions become more difficult, however with regard to numbers, Rule 22 must still apply. The important thing is that it is now treated as one cave, not two, because of the confusion which will inevitably arise sooner or later in scientific and other recording over just where the dividing line is, i.e. in which cave the observations are being taken. In some cases there will be *no* clear dividing line. One solution would be to use the lower number name as the cave name and retain the other as an entrance name for the higher number; another would be to convert both to entrance names and coin a new but related name for the combined cave. For further discussion refer to the ASF cave nomenclature guidelines.

6.3 Hierarchical grouping of features

The nature of some types of karst feature is such that they often contain within themselves one or more caves or cave entrances. Examples are karst towers, dolines, karst windows, poljes, uvalas, blind valleys, arches and bridges. Some even have other *karst features* within them, creating a three-level system, e.g. uvalas containing dolines containing caves.

As discussed earlier, all these features can be given numbers if there is a need to register them, the numbers being taken out of the same series as the nearby caves in the normal way. However where an area is characterised by them, i.e. there are a lot of them, it is advantageous to set aside a block of "thousand" numbers within the normal number series for each level of frequent karst feature.

Rule 23: Where an area is characterised by karst features which it is also desired to register, it is recommended that a separate block of "thousand" numbers be set aside for each type of frequent feature, preferably following any hierarchy exhibited between the feature types.

Examples for 3 different types of area:

1.	1 - 999	caves and entrances
	1001 - 1999	dolines (with or without caves)
2.	1 - 999	caves and entrances
	1001 - 1999	karst towers
3.	1 - 999	caves and entrances
	1001 - 1999	dolines (with or without caves)
	2001 - 2999	uvalas

Comments

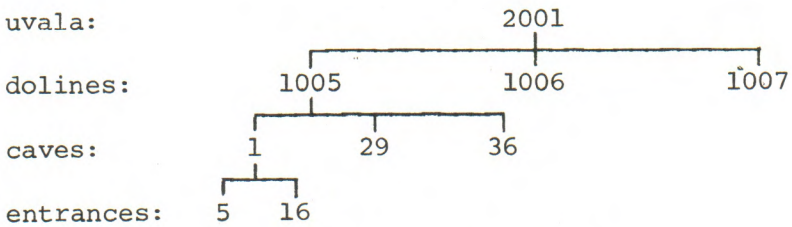
1. The basic advantage of this method is that it causes ready separation between the caves and various feature types, which is convenient in many ways. For example it causes all similar features to group together naturally in any ordered listing of numbers for the area. In Example 3 above, all caves and entrances would be listed first, followed by all dolines, followed by all uvalas.

2. Of course if there is only the occasional karst feature to be registered this method offers no advantage, and the karst feature should be treated in the normal way in among the caves and entrances, yet distinguished adequately by its feature-type letter.

6.3
Hierarchical grouping of features (Cont.)

Rule 24: Cross-references should always appear in the data for each interrelated karst feature, cave or entrance, but should only refer to the adjacent level above and/or below. The numbers in any higher level should be listed first, followed by those in any lower level, the latter being arranged in ascending number order.

E.g. taking a possible interrelationship in Example 3 above, where all the features associated with uvala 2001 are:



the necessary cross-references would be:

B-1 see 1005, 5, 16
B-5E see 1
B-16E see 1
B-29 see 1005
B-36 see 1005

B-1005D see 2001, 1, 29, 36
B-1006D see 2001
B-1007D see 2001

B-2001U see 1005, 1006, 1007

6.4
Multiple numberers in an area

In the unfortunate event that agreement cannot be reached over a single Cave Numberer for an area, then the following should be observed:

Rule 25: If it becomes necessary for more than one Cave Numberer to work independently in an area, then the following should be adhered to:

1. Each Numberer should work on a separate "hundred" block in the area number series, e.g. 1-99, 100-199, 200-299, etc. When a Numberer exhausts his block (!) he should move on to the next unused "hundred".
2. No number must be allocated nor reported on in any way until it is physically marked at the cave entrance. If this is not strictly adhered to, there is the risk of another Numberer allocating a second number to the same cave, with consequent confusion in the literature and in the records.

6.5
New areas

Rule 26: If further discoveries in a background area necessitate the creation of a new localised area, then the following should be observed:

1. Any already numbered caves should retain their same serial number and change only their area code. This will markedly aid continuity of reference.
2. The now cancelled serial numbers in the background area must not be reused for any other cave.
3. In any listing of the background area caves the cancelled numbers should always continue to be included but should state the cancellation and the transfer to the other area.

6.6
Other special cases

Rule 27: If other situations arise which have not been explicitly covered in this Code of Practice, then before any proposed solution is implemented the ASF Documentation Convenor should be consulted to ensure that it will not cause any problems with the Australia-wide registration of cave data.

7.
FORMAT OF NUMBER

Because of the structure of the number, it is not particularly critical as to how it is written, however some methods are clearer than others.

Rule 28: The preferred methods of representation of cave numbers under different situations are illustrated below.

3B-38R	*Full number* for rising B-38 in Victoria.
B-38	*Common form* of the above for normal usage.
B-50/56/57/105	*Multiple entrance* representation, used when it is desired to list them all. Here cave B-50 also has entrances numbered 56, 57 and 105.
B-4 to 10,27,29	*List* of caves or features comprising B-4 to B-10 inclusive, together with B-27 and B-29.

The hyphen between the area code and serial number could equally be replaced by a full stop, however the slash separators between multiple-entrance serial numbers should be retained as shown. A hyphen between serial numbers should not be used because its meaning can be ambiguous.

Comments

1. The use of a single blank between area code and serial number tends to make the number lose its unity when it is imbedded in text.

2. Putting the area code and serial number hard up against each other can lead to confusion when the area code ends with the letters I or O, or any numeric digit, or if the serial number starts with X (temporary number), and is therefore generally recommended against.

8.
PHYSICAL PLACEMENT OF NUMBER

8.1
Position

Rule 29: The positioning of the number at a cave entrance should be guided by the following:

1. It should be readily found by anyone searching but not obvious to the casual passer-by.
2. It should be located where it can readily be used as a survey point, both from within the cave and on the surface.
3. It should be on solid bedrock, not a loose nor separated piece (a reliable test is the sound when the rock is struck by a hammer).

8.1 Position (Cont.)

Rule 29: (Cont.)

4. If no bedrock is available or it cannot be placed where it can be read without using caving equipment, then it should be placed on a substantial post or equivalent installed close to the cave, e.g. on a steel star-post.
5. It should be located where it is safe from damage by ladders, belays, boots or other equipment.
6. It should be located where it is not likely to be overgrown or otherwise covered by soil, dung, etc.
7. Its final position relative to the entrance should be noted, and filed in the cave records.

8.2 Form

Rule 30: The physical form of the cave number should be chosen taking into account the following:

1. The difficulty of finding a number on the entrance.
2. The type of rock.
3. The susceptibility of the number to vandalism.
4. The disturbance to the natural appearance of the entrance.
5. The permanence of both the number and its legibility over an indefinite period of time in the local conditions.
6. The cost, portability, reliability, and ease of use of the number placement equipment.

Comments

Two methods which have been successful in their particular circumstances are:

SSS uses aluminium plates of various sizes fixed to the rock with 1/8" dia aluminium roofing nails and stamped with the cave number.

VSA uses a single aluminium rivet with a ½" dia flat head on which is stamped the number. The rivet is the countersunk type with a shank ¼" dia by 3/4" long. A hole approximately ½" deep is drilled into the rock using a ¼" dia rotary masonry drill (the bit is tungsten carbide tipped, and the best form of hand drill has been found to be the patented Leytool design; at this size rotary is faster, easier and truer than percussion star drill). The rivet is placed in the hole and expanded into it with a few blows of a hammer. The number is then stamped on using 1/8" letter and number punches, the area letters on the top row and the serial number on the second row. Where improved visibility is needed a round collar of weather resistant coloured plastic is threaded over the rivet before placement. In soft tertiary limestone rivets up to 1½" long are used.

Chiselling or painting are generally not very satisfactory methods - chiselling because it becomes difficult to see after several years in the weather, painting because it too deteriorates in the weather, and both because they are difficult to do without being unsightly.

8.3 Text

Rule 31: The minimum text for marking a cave entrance should be both the area code and serial number. The State code and feature type are not normally needed but can be added when desirable.

Comment

The area code should always be included so that in any reports by people not familiar with the numbering system, unambiguous identification of the cave will still result.

REPORT OF AN INCIDENT IN KHAZAD-DÛM

Stuart Nicholas

During the weekend of January 20th. and 21st.,1979,a party of four cavers visited Khazad-dum for the purpose of minor exploration and general familiarization,i.e. a fairly normal "tourist" trip.Unfortunately,"Murphy" always takes a hand in disorganising well-organised caving trips.The expected 12 to 14 hour trip developed into a marathon extending over 28 hours,owing to a storm during the Saturday afternoon.Although the total rainfall for the 24 hour period ending at 0900 Sunday was only 19 mm., most of it apparently fell during the Saturday afternoon.The result was a considerable rise in stream level making the bottom waterfall pitch impossible,hence blocking the exit of the party.

A brief description of the happenings leading up to the actual trip, and a rundown of the people involved will help to illustrate the situation.

The party leader was Stuart Nicholas (TCC).Other members were Eveline Tulp (WASG),Rauleigh Webb (WASG),and Chris Rathbone (TCC).All were experienced SRT cavers with Chris being a high grade climber.Stuart had most experience of Tasmanian wet and deep caving conditions,using both ladders and SRT.

During the couple of days before the trip,Ev and Rauleigh sorted gear,ropes and so on into sequence and packed the lot ready for transport to Maydena at the weekend.Already at the Maydena homestead was a group of TCC members including Bruce McIntosh,Sam Steane and Simon Stopps,together with Gordon Taylor from NUCC.This group had been caving in the Florentine during the previous week,and their offer to "sherpa" some of the gear to the entrance for the Khazad-dum trip was seized upon very promptly.

It was at this point Gordon Taylor asked if he might join the trip.Being completely unaware of his ability and previous experience,it was decided that the addition of a fifth person would disrupt the trip organization too much.It was later revealed that Gordon had been to Papua-Niugini during 1978 on an Australian expedition, and was an experienced user of SRT in deep and difficult caves.Also wishing to join the trip,but arriving too late was Peter Cover from Northern Caverneers, a group based in Launceston.Peter had done a number of Khazad-dum trips using SRT,including one through trip via Dwarrowdelf.

The main party of four,plus sherpas,arrived at the entrance around 09.30 Saturday, 20th.January,and after a substantial snack and the usual messing around, the group headed underground at 10.15.Just prior to this Bruce McIntosh was told to expect our return between 22.00 and 24.00 that night.He had previously offered to have a brew going for the returning party, and a couple of sherpas to help carry the gear back to the road.

At this stage, the stream was very low after a prolonged dry spell in the are ,and there appeared to be no reason why the conditions should change.The weather forcast for the weekend was for possible thunderstorms on the West Coast,but fine elsewhere.It would be as well to note here that the West Coast of Tasmania has a weather pattern completely different to that of most of the remainder of the State,owing to the prevailing westerly winds.

A fairly uneventful trip down to the top of the last wet pitch(the second last pitch before the sump,and just above the Brew Chamber),except for Stuart's rappel rack which was dropped down the first 28 metre pitch.The party assembled there at about 15.30- a slow descent, but time was no problem at that stage.Stuart noted that the stream was slightly muddy and a little higher than expected.This was indicated to the others.After some discussion, a decision was made to go quickly down to the sump,and come straight up again.The descent of the wet pitch proved to be chilly and a brew was made in the Brew Chamber while the last pitch was rigged.

Just before descending the final pitch to the bottom chamber, a look at the last wet pitch provided a surprise in the form of a rapid and large increase in the stream level.This had occured over a short period,although at this time the pitch was still negotiable.

After a quick look at the sump(321 metres below the entrance) all four of the party made their way back to the Brew Chamber.

At this stage(approximately 18.00)it was obvious that an enforced stay was imminent.Another brew was made as spray was being blown into the chamber from the waterfall,removing body heat very quickly,and posing a great risk of exposure.About half an hour after the brew,severe chilling was beginning to present problems.The stay was obviously going to be prolonged,so, after further discussion, a decision was unanimously made to descend to the relative warmth of the final chamber-no draughts,plenty of sand and room to move.A message was outlined with stones on the Brew Chamber floor-" AT SUMP".

Upon arrival at a suitable bivi site near the sump(just upstream from the big sand choke),Chris set up a rock in the stream as a depth indicator.A pit was dug in the floor to (a) warm everyone up,(b) enable a more effective huddle to take place,(c) provide an established"camp".

REPORT OF AN INCIDENT IN KHAZAD-DUM (Cont.)

All were able to sleep ,though the cold limited the time to about two hours before exercise was required to warm up again.Following each of these exercise periods,some of the food,which consisted mainly of dried fruit and jelly beans,was consumed before going back to the "HOTEL CALIFORNIA" for more sleep.The waterfall into the bottom chamber was inspected about 02.00 hours on Sunday .It was still flowing very strongly although the stream level of the bivi site had dropped 8 to 10 cm. at a point where the stream was about 1.5 metres wide.

By now, the surface party had become somewhat alarmed by the non-appearance of the underground party.They were obviously aware of the rainfall and the rise in stream level,but did not realise the full effect this had had on the waterfalls in the bottom half of the cave.Bruce McIntosh had woken Max Jeffries at Maydena and telephoned Police Search and Rescue at Hobart in order to set up a Search and Rescue standby.The deadline for action was set as 10.00 Sunday.In the meantime,it was decided that Gordon Taylor and Peter Cover should grab some food and gear,and head down to see what was wrong.They left the surface at 04.30,having to contend with the early morning apathy syndrome and a much reduced stream flow. Since all the pitches were rigged,and they had very little gear Peter and Gordon arrived in the Brew Chamber at around 06.00.

Just before this time,Ev and Rauleigh had decided to inspect the big waterfall into the bottom chamber,leaving Chris and Stuart to look after the "camp".By now the stream level had dropped considerably,and Stuart had made up his mind to send one or two of the group out to let the surface party know what was happening.When Ev and Rauleigh saw the lights at the top of the last pitch,they waited for Gordon and Peter to descend on a rope they had brought from the surface.

With everyone back at the bivi site,another brew was made, and the "goodies " from the surface consumed. A unanimous decision was made to send Chris and Stuart out post haste in order to call off the Search and Rescue standby.Peter and Gordon would assist Ev and Rauleigh to partly de-rig the cave.The stream had dropped about 12 cm. although it was still higher than normal.Chris and Stuart were on the surface at about 09.30,looking and feeling slightly shattered,but glad to be on the surface.

The others appeared at about 14 30 hours,with Ev and Rauleigh looking more shattered than Stuart and Chris, but otherwise O.K.The gear had been hauled out to the top of the first wet pitch (approximately 180 metres below the surface) to be collected during the week by Ev, Rauleigh and Peter.The trip was all but over,having become more of an epic than was originally planned,particularly for Ev and Rauleigh who,being from Western Australia,were not really used to the cold wet conditions encountered in Tasmanian potholes.

The trip ended successfully and without need for rescue.To all those who helped or were prepared to help should the need have arisen,a sincere thanks is extended by Ev,Rauleigh,Chris and Stuart.Deserving of a special thanks are Bruce McIntosh,Max Jeffries,Jeny Cross(A.N.M. operations manager,who offered the full facilities of A.N.M. should it have been required.) and especially Gordon Taylor and Peter Cover who missed the trip proper,and braved the early morning apathy to go and see what was happening in Australia's deepest pot.

Some further notes and thoughts on the whole episode might be in order.

(a) Everyone on the trip was quite capable of negotiating the cave with normal stream levels.

(b) The decision to keep going down from the point where the flood was first suspected,i.e.the top of the second last pitch,in retrospect,seems the wisest move.Had the party started out from that point,there was a good chance of being trapped by the rapidly rising stream ,with no dry place to rest and wait out the flood.The wet pitches would certainly not have been safely negotiated during the flood peak.

(c) There was probably sufficient food for another 15 to 20 hours of "normal" eating,and choofer fuel for a similar possibly longer period.A billy with some soup and mixed fruit in it was lost somewhere near the bivi site-it possibly rolled into the stream and was washed down to the sump.Stuart would appreciate its return if anyone finds it,together with a blue enamel mug and a battered teaspoon.This hardware has great sentimental value!

(d) Cold was the main problem with its inherent hypothermia dangers.Towards the end of the stay,clothes had dried somewhat and the party was able to keep relatively warm with less exercise.Possibly a "space blanket" or some type of bivi bag would have helped.

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Where Alph, the sacred rive ,ran
Through caverns measureless to man
Down to a sunless sea.'

Samuel Taylor Coleridge,(Kubla Khan).

DOWN UNDER ALL OVER .....

news from around the societies.

CSS : CSS has continued to concentrate on its visitors book programme.The installation and checking of these has meant trips to Mt.Fairy,London Bridge,Duea, Yarrangobilly and Wee Jasper.Cliefden was also paid a visit recently.Several bushwalks have also been held,one to the Bundawangs and one to Wingan Inlet.CSS also participated in a joint trip to Duea Cave, and several members were involved in the production of a submission to the National Parks Service on the management of the Duea-Wombilliga National Park.

MSS : Ken Keck reports that during 1979, the activities of MSS have been mainly centered around Abercrombie Yarrangobilly and Jenolan,and have been considerably intensified by the acquisition,during the year, of a set of R.D.F. equipment,which has been put to very good use in cave correlation,and confirmation of the area survey at Abercrombie.
On August 12 th., the Director of Tourism,acting for the Minister,unveiled a plaque marking the site of a'time capsule' which MSS has placed in the main Arch Cave at Abercrombie.This contains a considerable amount of speleological literature and data relating to the area,as well as items of contemporary interest,which should prove interesting when it is opened,hopefully in a 100 years.Cave tagging is now almost complete at Abercrombie,and the detailed area map is rapidly nearing completion,and will hopefully be completed in 1980.Work at Jenolan has mainly centered on Maiden Cave (J 79) where prospects are still promising for extension.Bottomless Pit was also visited and thoroughly photographed and sketched.Activities at Yarrangobilly include restoration work in Y 5,excavation in Pine Tree Cave,and specimen collection in part of Y 2.The data on this is expected to be published shortly. MSS has been happy to co-operate with other clubs during the year,and expressed willingness to assist with our equipment ,should we receive any requests relative to any project work being undertaken by other speleos.

NUCC : Activity has been at a low ebb recently ,owing to its being exam time.Nevertheless some trips have been made lately.Three days of great vertical caving were had at Buchan on the October long weekend. Wyanbene has been visited several times,as has Bungonia.NUCC members participated in a joint Canberra clubs' trip to the new Duea Cave,NUCC members managing to double the known length of cave.Big Hole was also visited and descended.NUCC also participated in the preparation of a submission on the Duea-Wombilliga National Park.At present, the club is preparing for a trip to Tasmania over the summer holidays.

SCS : Kevin Kiernan,with varying teams has done some intensive work surveying,describing and exploring sea caves in South -East Tasmania.Many of these are in the spectacular dolerite cliffs,which plunge into the sea off the Tasman Peninsula.Ross Scott and Karen Hughes have assisted with surveys of sea caves at Blackman's Bay also.In late June,Kevin,Graeme Bailey and Steve Harris partly explored the Julius River Cave,as then unexplored,set among beautiful beech forest in the remote North -West of the state.Leigh Gleeson Stuart Nicholas(TCC),Chris Rathbone and Lin Wilson bottomed Tassie Pot in nine hours on 22 nd September.Also in the Florentine area,trips were held to Welcome Stranger and to Owl Pot.Kevin and Steve explored an area near Hobart,for sandstone caves in late August,and while not shouting from the rooftops about the caves,found features of the surrounding countryside fascinating.Kevin has been monitoring the evolution and demise of an ice cave on the Eliza Plateau at Mt. Anne, over several trips in October/November.Lin Wilson,Leigh Gleeson,Pete Russell,B.Wilson and C. Wilson undertook the long march to Judds Cave in the South-West during the first weekend in September. In early August,Kim Darling was introduced to Kubla Khan.Other trips were taken to Mole Creek recently(Lynds Cave and Ghengis Khan).

SUSS :This year ,activity began with numerous freshers' familiarization trips to Bungonia,Wyanbene,Coolamon,and of course,Jenolan.Progress was made upriver in Imperial Cave (by a South Australian diving team) inspired Bruce Welch to persist further in the exploration of Spider Cave(postponed two years previously).After a series of strenuous squeezes Bruce and Mike Lake broke through on June 16 th.,

DOWN UNDER ALL OVER(Cont.)

SUSS (Cont.) : and discovered about 190 metres of the legendary Hairy Diprotodon (Jenolan Underground River South of Mammoth Cave). A high level well decorated passage was also discovered and since then, a further 130 metres of high level passage has been found.In early October,Guy Cox and Bruce Welch free dived a sump upstream and found a further 65 metres of river.To the north ,this seems to emerge from a vertical rift in the river bed.To the south, the river disappears into a rock-pile which roughly corresponds to a rockpile in the river upstream in Imperial Cave.Most SUSS activity since the Hairy Diprotodon discovery has centered on its surveying and exploration. The possibilities of further extension have by no means been exhausted.The search continues.... A SUSS Bulletin devoted entirely to the Spider Cave discoveries is under preparation.

UQSS : This year UQSS has had very few weekend trips to the closer caving areas.The Kempsey area was visited in Easter this year,with trips to Carrai, Kunderang and Windy Gap.Jan Surridge and Greg Williamson were married in Carrai Clearing at the foot of the limestone cliff on Easter Sunday. In July, there was an expedition to North Queensland ,taking in Fanning River,Camooweal and Lawn Hill Gorge.Several extensions were pushed in Kalkadoon Cave.Lawn Hill was discovered to be an area of exciting caving potential.Plans are underway already for next July's trip to concentrate exploration there we hope.Mt Etna was visited in August,and more surveying done.The latest on the conservation front is the publication of a pamphlet setting out the case for saving Mt.Etna,and including it in the Fitzroy Caves National Park,currently only covering Limestone Ridge.A large and long "Christmas Dinner Trip " is planned for Windy Gap at Kempsey. Dave Gillieson is leading a small crowd to Tasmania in January.

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VISITING TASMANIA ?

R.J.Cockerill & Aleks Terauds

If you are coming to Tasmania to go caving , bushwalking, canoeing or climbing, i.e.,going bush, you are requested to register your trip with the Tasmania Police.Registration and de-registration forms are available at every Police Station in Tasmania.This requirement is in addition to the ASF ethic of notifying the local club(s) of your intention.

Why ? S & R in Tasmania is the responsibility of Tasmania Police assissted by, when necessary, volunteers from the appropriate outdoor activity club(s) acting under the authority of the Police.Contingency plans and operation procedures are formulated by the Tasmania Police/ Federation of Tasmanian Bushwalking Clubs Liason Committee.All three Tasmanian ASF Clubs are represented on this Committee but obviously the prime responsibility for cave rescue rests with the local caving clubs.At recent State-wide S & R Symposia, it was agreed that the ASF ethic re local contact was not sufficiently strong, and to facilitate prompt and effective S & R procedures, all visiting parties should avail themselves of the benefits of the Tasmania Police S & R Organisation Trip Registration procedure.

It has been recognised and accepted by the Tasmanian S & R organisations that a confirmed Tasmanian cave incident will, or may require a national call-out at an early stage,owing to lead and delay times.In fact, a national stand-by is an item of high priority in the Tasmanian contingency plans.

Obviously you are considering a Tasmanian trip because this state either presents a challenge to your walking, caving or climbing skills or perhaps just somewhere new to visit.Do not leave the Tasmanians in the dreadful situation of having to look for someone somewhere in Tasmania, as they didn't return home to the mainland a week before. What do you have to do ? On arriving in Tasmania,the party or the leader should report to any Police Station,and complete in duplicate a Trip Registration form.This covers details of itinerary,transport,names and addresses.etc., route ,destination and estimated date and time of arrival there. One form is sent to headquarters,and the other is sent to your destination. When you have completed your trip,you notify the Station at your destination.You can change your itinerary by notifying any change to the local Police Station.We find the Tasmania Police friendly and obliging,and we would like you to maintain this relationship.

What's in it for you? Remember that Tasmania has severe and often unpredictable conditions,even in mid-summer, above and below ground.Time is the most important in the case of an accident.For us ? We get you home safely, and the information will be valuable in the justification of Government expenditure on S & R equipment and organisation, special facilities and services in areas and conservation arguments. Welcome to Tasmania !

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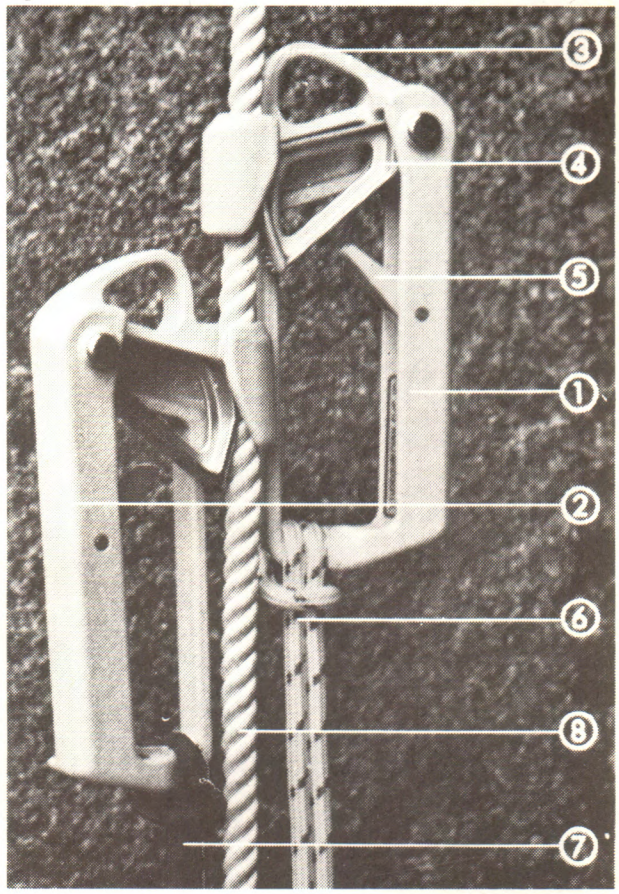

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