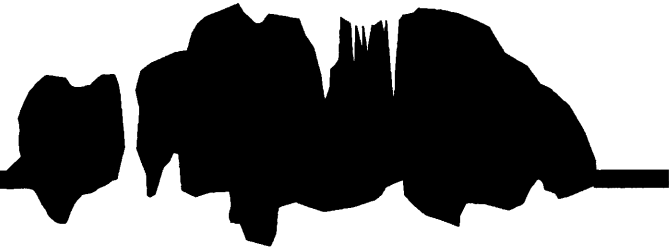


# NATIONAL CAVING ASSOCIATION



## Minutes of the meeting held on 15 November 1997 at the County staff social club

### 1. Administrative

- 1.1 Present: Les Sykes, Glenn Jones (CNCC); Jenny Potts (DCA); Owen Clarke (Rope Test Officer); Nick Williams (Convenor).
- 1.2 Apologies for absence: Les Williams (CSCC); Adrian Fawcett (CCC); Paul Rafferty (BCRA); Mark Lowe (DCA).
- 1.3 Minutes of the meeting of 5 April 1997: Accepted without amendment.

### 2. Anchor replacement programme

- 2.1 Regional reports:
  - 2.1.1 S. Wales: Faxed report sent to OC from AF - no problems.
  - 2.1.2 CNCC: No problems in the Dales, but some concern was expressed about the standard of record keeping in other areas. Agreed regional representatives to bring examples of records for discussion at next meeting. ACTION: LS/LW/AF/ML
  - 2.1.3 Derbyshire: some problems with (apparently out of date) resin. Otherwise OK.
  - 2.1.4 CSCC: Verbal report via telephone to NW - no bolts placed on Mendip since last meeting.
- 2.2 LS indicated that a number of points had been identified in the last few months:
  - 2.2.1 Nozzles for Hilti and Resifix adhesive tubes are not interchangeable and should only be used with the correct type.
  - 2.2.2 The mixing spiral up the centre of the Resifix nozzle is fragile and prone to become displaced, which can result in poor mixing of the resins. Take care when handling them.
  - 2.2.3 The quicker setting time of the Resifix resin has allowed the waiting time before full load can be applied to a newly placed anchor to be reduced to 12 hours (from 24).
  - 2.2.4 It is important to stress the need to WEAR GOGGLES when using the resins.

A new edition of the installation guidelines is in preparation and will be issued by LS on 1/1/98. ACTION: LS
- 2.3 LS has read through BS EN 795:1997 and BS 7883 and reported that there is nothing in these standards which is significantly different from what we are doing at present, except the requirement for proof loading, which we have agreed is not desirable.
- 2.4 The purchase of the test equipment from Hilti is still ongoing. ACTION: LS
- 2.5 Alternative resins from Spit and Hilti have been considered.
  - 2.5.1 The Spit Epcon Ceramic 6 resin had been tested. It was found that it took too long to cure and could not be got out of the tubes when cold. LS has written to Spit saying that it cannot be endorsed by NCA.
  - 2.5.2 Hilti's HY150 resin was on display at the BCRA Conference, but advice from our contacts within Hilti is that it is unsuitable for our application and not even worth testing. Some may be forthcoming for testing in due course, but it is not likely to be of earth shattering significance.

- 2.6 There has not yet been any progress on the possibility of using Tommy Taylor's cave but this was still being pursued by PR. **ACTION: PR.**
- 2.7 NW brought the new Hilti TE5A drill to the meeting. This is a 24V 350W drill and is the best available alternative to the Bosch GBH24VR drill which is no longer made. The drill was given to LS to take away to test, on the understanding that it would be passed to Ralph Johnson (DCA) in due course. NW will investigate the purchase of another for use by CNCC. **ACTION: NW & LS.**
- 2.8 GJ explained that he had prepared a presentation with slides and OHP's on the installation and use of the Ecoanchor. This had been shown at a recent DCUC event and went down well. The presentation is available for anyone to use - contact GJ for details.

### 3. Rope testing programme

- 3.1 The interpretative document was published at the BCRA conference and is now widely available (circulated with SpeleoScene). It has been generally well received but has highlighted the need for an accurate and complete description of the test itself. OC agreed to provide the basic content of this to NW for preparation and presentation. **ACTION: NW & OC.**

There was considerable discussions about how a sample of rope should be selected for testing. NW said that it had not occurred to him that a sample might not be taken from the centre of the rope, but OC said that most samples came from the ends of a rope. Several hypotheses were put forward as to the best place to select a rope sample from (e.g. not from the first thirty feet of a rope, which would either be on the floor of a pitch or in the rigging at the top), but OC said that the evidence seemed to indicate that the strength of a given rope was pretty consistent along its length. GJ offered a sample of rope with which to test this further. OC also said that except for where damage was very obvious, the visual appearance of the rope did not seem to be a particularly good guide to the strength either. On the basis of the information we have it would appear that we would be justified in telling people to select a length at random! OC agreed to prepare a summary of what we do know (and why) in relation to this for discussion at the next meeting. **ACTION: OC & GJ**

- 3.2 Documents had been sent to the insurers via Bryan Ellis and we have been assured that the programme is covered.
- 3.3 OC and JP reported that the financial issues relating to the rope test fund had been sorted out with the new NCA Treasurer.
- 3.4 OC explained that his reservations about prEN1891 relate to the classification of ropes into types suitable for abseiling and for prussiking, and suitable for abseiling only. The problem with this is that the distinction between the two types of rope is not clear to cavers. The second problem is that the obsolescence data provided by manufacturers does not appear, on the basis of the tests done, to be realistic.
- 3.5 The recommendation made by OC to users of ropes is that the ropes should be tested when the manufacturer's own life expectancy is exceeded.

Discussion ensued about the actual purpose of the continuing programme of NCA testing. GJ expressed the opinion that since the evidence seemed to be that ropes did not break in use, and had more than adequate strength for the application concerned (i.e. were never the weakest link in the system) the need to test them was largely cosmetic. We should be using the tests as a means of finding out more about rope performance rather than simply to say whether or not they are safe, since they clearly are.

NW suggested that what we actually needed to do was to start to produce an NCA guide to caving ropes, since this would provide a focus for the information which we wanted to provide for cavers, and make it clearer what data was missing. Loathe though the committee was to create more work for itself, this proposal was generally seen as sensible.

A provisional contents list for the booklet includes:

- Manufacturing (how ropes are made);
- Selection;
- Use, including knots;
- Damage: physical and chemical hazards;
- Storage
- Cleaning

- Testing
- Use (cutting, marking and keeping records).

It was noted that the intention of this booklet was not to provide yet another guide to SRT.

All members of the committee should look out for sources of suitable material for the booklet.  
**ACTION: ALL**

- 3.6 It was agreed that no serious modification to the test rig should be undertaken until we have agreed the priorities for further developing the test programme. However, it would be worth trying to get plots of the tension profile during a drop, and to this end OC will locate the load-cell and NW will look into suitable data-logging apparatus. **ACTION: NW/OC**
- 3.7 NW had circulated a discussion document on rope testing (see attached). This document needs further development, and time did not allow a detailed discussion at the meeting. However, the following additions to the tests were proposed:
- Tests on rope/ascender combinations since this is one of the likely modes of application of high (fall) forces to the rope
  - Wet/dry performance comparisons

#### 4. Standards update

- 4.1 An updated draft of the standard for Low Stretch Ropes had been received and circulated to those who had responded to an e-mail request for expressions of interest. OC had made a response direct to the BSi committee in time for the relevant meeting. NW asked that future submissions be made via himself in order to provide a co-ordinated response but accepted that the time constraints made this difficult in the circumstances which applied to this particular meeting where we had only received the draft standard a few days before the meeting (and after the final date for comments).
- 4.2 OC said that it would be helpful to have greater contact with the people who actually are responsible for drafting the standard. NW said he was working on this.

#### 5. Fixed aids

- 5.1 Regional Council representatives gave an idea of the sort of gear which they would like to see included in such a policy:
- CSCC - Chains
  - CNCC- Fixed iron ladders, traverse wires
  - CCC - Daren ladder
- 5.2 JP said that ML was working on a policy for DCA since it had been felt by DCA that a policy was required in their area as soon as possible. The view was generally expressed that any policy, while being regional in application, should be developed to be workable on a national basis and so NW said he would contact ML and ask if his draft could be circulated nationally for development into an NCA policy. *[This has been done, and the document is appended to these minutes. Comments should be sent direct to Mark Lowe or should be submitted to Nick Williams as soon as conveniently possible.]*
- 5.3 GJ said that CNCC had already seen problems with some clubs fixing aids (i.e. bolts) which were not in accordance with the Anchor programme. NW said that the purpose of a policy was not to try to 'ban' such activities, rather it was to lay down the basic principles for such aids and set out the criteria which must be met in order for the aids to benefit from the nationally funded insurance, training and maintenance programme provided by the National Policy. GJ agreed to propose wording for the policy aimed at discouraging the placement of non-acceptable aids (including anchors).
- 5.4 LS asked about the fixed traverse wire in Kingsdale Master Cave. NW said he thought this had already been dealt with, but he would check the files.

## 6. Other business

- 6.1 BMC are holding a technical seminar at the World Indoor Climbing Cup Final in Birmingham on 29 November. It was agreed that the Committee should fund attendance by either NW or OC. **ACTION: NW/OC**
- 6.2 The situation regarding the claiming of travel expenses was clarified by NW as being that claims should be made via the Equipment Committee to the Training Committee budget.
- 6.3 LS asked about proposing an increase in the travel rate. NW ruled that this was not a matter for the Equipment Committee but should be raised by the CNCC rep. at the next National Council Meeting.
- 6.4 LS raised the issue of a sit harness which appeared to be showing signs of premature ageing. He claimed to know of other people with the same model of harness which was showing similar problems. It was agreed that the NCA equipment committee did not have the resources necessary to investigate this matter at this time, but NW said that, if requested, he would approach the BMC Technical Committee to ask them to look into it on our behalf.
- 6.5 LS said that in view of the number of enquiries he had received from overseas he and GJ were preparing an article on the Anchor Replacement Programme for publication in the English language version of the French magazine 'Speleo'.
- 6.6 JP said that she would need the annual report of the Committee for circulation as part of the paperwork for the 1998 Association Agenda as soon as possible after the New Year.  
**ACTION: NW & OC**

## 7. Next meeting

- 7.1 The date of the next meeting was set as 25 April 1998 at 10:30.

There being no further business the meeting closed at approx. 13:55.

Nick Williams  
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**Convenor's note:** copies of these minutes and other Equipment Committee documents (including previous minutes) may be downloaded from the Equipment Committee web site at [http://www.conformance.co.uk/EQUIPMENT/eq\\_index.html](http://www.conformance.co.uk/EQUIPMENT/eq_index.html).