



American Mountain Guides Association

MOUNTAIN BULLETIN

Fall 2009 | A Publication of the American Mountain Guides Association | amga.com

2009 AMGA Annual Meeting Main Event in Memory of Craig Luebben

"I laughed, I cried, it was better than Cats." I've personally never seen Cats, but Margaret's reaction to The Main Event – Presented by W.L. Gore – at our 2009 Annual Meeting leads me to believe that we put on a good show. Being a first-timer, I have nothing to compare it to, but it's safe to say, I walked away from the nights festivities rather humbled. The guiding community is tight. Perhaps family is a better description.

The tension that permeated the meetings leading up to The Main Event was promptly released at the door. Greeted by a running slideshow of Craig Luebben, the discussion moved from access, prerequisites and membership dues to stories of Craig's exploits and whether or not Adam Fox would win the tent in the raffle for a third year in a row. A large quantity of excellent beer from Upslope Brewing provided the social lubricant and grub from Pasta Jay's helped offset the effects of the first "real" beer most had, had in nearly a week. Everyone mingled, purchased raffle tickets, checked out some items that Arc'Teryx, Five Ten, Gore, Petzl and Leave No Trace had on display, and made their bids on all the fabulous silent auction items.

With dinner complete and the silent auction ended and all items paid for, things started to ramp up. More adult beverages were consumed, Adam Fox did not win the tent in the raffle (but he did win one in the silent auction), Keith Garvey was schooled by Evan Stevens in a push-up competition for an Arc'Teryx harness, and Betsy wowed everyone with her mad throwing skills as she hucked several items into the crowd.

The awards presentation was the highlight of the evening. Rob Hess kicked things off introducing the Exam Graduates from 2009. Special mention must be given to Adam George, Ben Mitchell, Julia Niles, Jonathan Spitzer and Joe Stock for achieving their IFMGA Certification. Next up was Marc Chauvin presenting a somewhat unexpected award. Marc seems to have an opinion on everything and a burning desire to share those opinions. In the past, Marc held a very strong opinion that certain certifications must be earned, by the book...no exceptions. So when Marc announced that Tom Hargis had achieved IFMGA Certification everyone understood they were witnessing a very special moment.

Henry Beyer presented Alain Comeau with the Outstanding Guide of the Year Award. I think I spoke to Alain at least 3 times in my first week at the AMGA as he called to check and re-check that he truly was the recipient of the award. Congratulations Alain, the award was well deserved.

We had some very special guests in attendance to receive both The Presidents and The Lifetime Achievement in Guiding Awards. Presented respectively by Margaret Wheeler and Dick Jackson, Silvia and Giulia Luebben graciously accepted both awards in Memory of Craig Luebben. Silvia thanked the community for their support and reminded everyone that sleeping in her backyard was still an option. Several of Craig's friends shared stories about their times spent with Craig. Doug Nidever, Keith Garvey, John Race, Joey Vallone and Malcolm Daly had everyone bursting with

laughter and holding back tears. The entire crowd rose when Doug asked those willing to stand by Silvia and Giulia as they deal with their loss to stand in support.

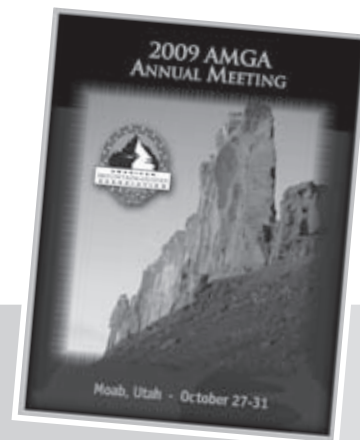
Malcolm from Trango brought with him a set of Big Bros with an image of Giulia, by Jeremy Collins, etched into them. The first set in existence. His intention was to auction them to the highest bidder to raise a bit of money for Giulia's College Education Fund. How the auction unfolded was all at once inspiring and a bit unexpected. Opening bid was their retail value of \$500. The bidding gradually increased a couple hundred dollars at a time to \$1000, \$1500 then things got serious. Two thousand dollars, \$2500 all they way up to \$4000! A huge thank you and congratulations goes out to John Race for his winning bid.

Jack Tackle closed out the evening with an inspiring slideshow of some pretty amazing climbs in Alaska. Amazing photography and Jack's subtle wit kept everyone engaged 'til the very last slide.

By all looks and appearances, a good time was had by everyone. By nights end the coolers were empty and only 1 serving of pasta was left. Nearly \$5500 was raised for the AMGA and another \$800 for the Craig Luebben Memorial Scholarship Fund, not to mention \$4000 for Giulia's College Education Fund and another \$1000 for the Craig Luebben Memorial Fund.

I want to personally thank everyone for attending and look forward to seeing you all next year in Boulder.

Maintain.
Josh Harrod
Membership Director



In this issue

- President's Corner — 3
- ED Corner — 4
- TD Corner — 5
- Program Director Corner — 6

AMGA Board of Directors

EXECUTIVE COMMITTEE

Maragert Wheeler | President
North Bend, WA
206.818.7947
mag@proguiding.com

Majka Burhardt
Boulder, CO
970.290.7822
mb@majkaburhardt.com

John Race | Vice President
Leavenworth, WA
509.548.5823
jr@mountainschool.com

Clint Cook
Ouray, CO
970.290.7822
info@ourayclimbing.com

Evan Stevens | Secretary
Garibaldi Highlands, BC Canada
801.212.3438
evan_stevens@hotmail.com

Adam Fox
Hendersonville, NC
888.284.8433
adam@foxmountainguides.com

Scott Soden | Treasurer
Denver, CO
303.242.5758
scottsoden@alpinacapital.com

Keith Garvey
Boulder, CO
720.221.8302
keith_garvey@hotmail.com

Rob Hess | Technical Director
Jackson, WY
307.733.4979
rob@jhmg.com

Dick Jackson
Aspen, CO
877.790.2777
dickjackson@aspenexpeditions.com

Peter Gould | Legal Counsel
Denver, CO
303.894.6176
pgould@pattonboggs.com

Kyle Lefkoff
Boulder, CO
303.444.6950
kyle@bouldventures.com

Jim Pearson | Legal Counsel
Denver, CO
303.478.1115
jpearson@ph-law.com

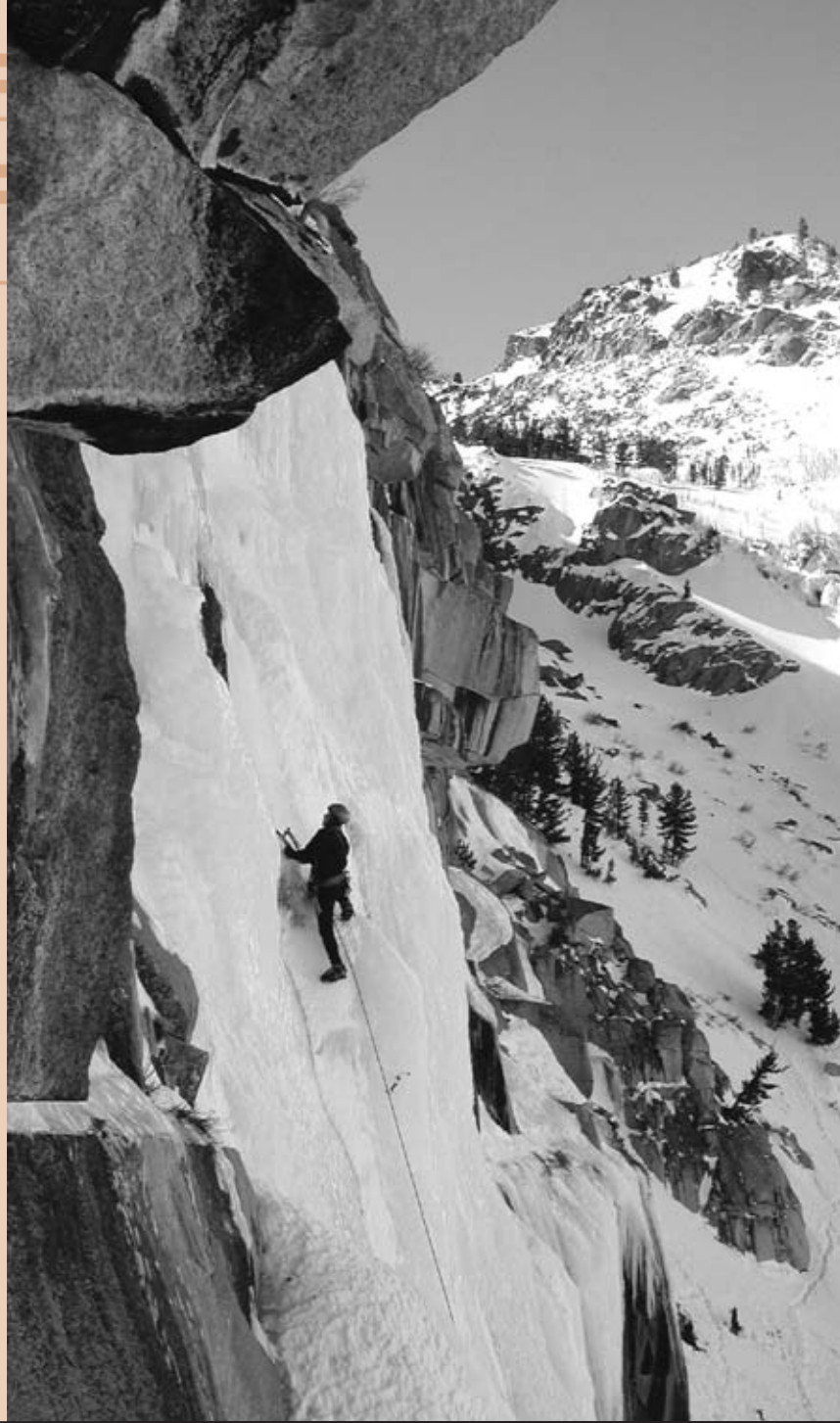
Marty Molitoris
Rosendale, NY
845-658-3094
marty@alpineendeavors.com

Matt Brooks | Historian
San Francisco, CA
510.797.7980
rewmb@aol.com

Dale Remsberg
Louisville, CO
303.818.8009
daleremsberg@mac.com

Martin Volken
North Bend, WA
206-525-4425
martinvolken@proguiding.com

John Winsor
Boulder, CO
303.579.9227
jtwinsor@gmail.com



AMGA Mountain Guides Association
PO Box 1739 | Boulder, CO 80306 | 303.271.1277 fax

NEWSLETTER DEADLINE

The Mountain Bulletin is Published in February, May, August, November. The next newsletter will be published on February 25, 2010. Deadlines for all submissions in 2010, including advertising are: January 9th (winter issue) April 10th (spring issue) July 10th (summer issue) October 9th (fall issue).

NATIONAL OFFICE STAFF

Executive Director | **Betsy Novak**
Program Director | **Henry Beyer**
Membership Director | **Josh Harrod**
Accreditation Director | **Ed Crothers**
Climbing Instructor Program Director | **Ed Crothers**
Accountant | **Asha Nagda**

READ THIS DISCLAIMER!

The AMGA, its officers and employees, authors, editors, artists and volunteers assume no responsibility or liability for accuracy, effectiveness, or safety of any technique or advice described in this publication. It is the responsibility of the individual climber or guide to investigate technical techniques and evaluate them for safety and applicability.

NEWSLETTER CONTRIBUTORS

Betsy Novak is the AMGA Executive Director
Henry Beyer is the AMGA Program Director and a Certified Single Pitch Instructor
Josh Harrod is the AMGA Membership Director
Ed Crothers is the AMGA Accreditation Director & Climbing Instructor Program Director as well as a Certified Rock Instructor and SPI Provider
Margaret Wheeler is President of the AMGA, an IFMGA Guide and an instructor for the AMGA
Rob Hess serves as the Technical Director of the AMGA. He is IFMGA certified and is the senior guide/owner of Jackson Hole Mountain Guides
Photo Credits: Mark Houston, Dick Jackson, Michael Silitch, Margaret Wheeler



PRESIDENT'S CORNER

by Margaret Wheeler

Hello Everyone, Greetings from sunny day in mid-November, the time of year when it is almost the end of climbing season, almost the beginning of skiing season. This November I am focused on writing about the events of last month, the amazing and intense Annual meeting we had in Moab, Utah. In this issue you'll hear from Betsy, Josh, Henry, Ed and Rob about different aspects of the meeting; I'll focus on the round table and the issue of access in the US.

First, I'd like to say a big Thank You to everyone that made the trip to Moab – we had a great turnout for the fun events, and even more impressively we had over 40 people attend the Board meeting and over 70 people attend the round table! I can't say enough how much I appreciate everyone taking the time to listen, ask questions, and get involved in the meetings. I hope those of you that attended came away with a better understanding of our organization and a better connection to the community we are so lucky to be a part of. For those of you that missed it, I hope we can convey the core issues and information in this newsletter and via our electronic correspondence.

At the round table session we had 75 people from all over the country, and we structured the session to give an opportunity for information exchange and a question-and-answer session. To begin, I gave a summary of the work that has been done by both organizations in the past 6 months. Then Scott Schell, the ED of the CGF, gave an explanation of the proposal for the restructure of the CGF and place within the AMGA's work on access. We then opened the floor to questions. The session that followed was characterized by a wide variety of perspectives and concerns; we heard from new guides entering the program, seasoned guides or guide service owners, and folks from all over - the northeast, the southeast, and the west.

The CGF proposal gave us an excellent starting point for discussion of some of the specifics of the difficult issues on the table. At the core, we are framing the discussion around the following question: how should the AMGA work to improve access in the short term, and the long term? Through the process of reevaluating the AMGA-CGF relationship, it has become increasingly clear to me, to Betsy, and to the Board that we need to create and develop a long-term vision and plan for access in the US. The CGF fits in as part of this plan that deals with the issue in the short term, and in its evolution

we are beginning to work through some of the core stumbling blocks we face. The round table meeting was a great forum for both concerns and ideas; here is a small sample of some of the questions:

“Why not create a network of guide services to develop opportunities for guest guiding?”

“What other options have we looked in to for the short term? Is the CGF the best solution we have?”

“We all have strong common ground – what are the real stumbling blocks towards working together?”

“How can we create a level playing field for credential-based guiding in the US?”

“What is the financial and legal landscape that we are dealing with as guides in this country?”

To answer these and other questions, our plan is to generate a series of Frequently Asked Questions (FAQ's) and answers. These will be built as the dialog progresses, and will be posted on the AMGA website and sent out via email correspondence to the membership. For those of you who attended the round table, thank you once again for your time and questions; for those who were not present and for those with questions still remaining, I hope the FAQ's will help to increase your understanding of the issues and solutions we are examining.

Our work for access must happen in a combination of ways, especially in the short term. As I see it, our situation is analogous to the question of our national energy policy. In the US we use oil, gas, coal...and we are adding or increasing the use of solar, wind, nuclear and alternative fuels. In preparing for the long term, we may plan to be free of fossil fuels, but until we have the technology and

the national implementation we cannot yet rely on any single energy source. We need a combination.

By analogy, access in the US is so complicated that to meet the needs of American guides that we need to have more than one solution. Even more importantly, our multiple solutions must fit together and work together as part of a larger plan. As a board, we have agreed that the CGF is a part of the solution for the short term, and as such we need to support its restructure so that it can be set up for success and benefit as many certified guides as possible. At the same time, we have before us the task of creating the long view, and devoting resources towards improving access in the US on a federal and state level.

The Board of Directors meeting was a long day of board work, and we had 45 people sitting in on the meeting. It was a productive session, with information on progress from various aspects of the organization, a solid financial report, and the consideration of the AMGA-CGF proposal. The discussion for this proposal became an excellent continuation of the round table session, and before closing we decided as a board to send the proposal back to committee for revisions, and to consider it again via conference call in late November.

Stay tuned – there is so much going on at the AMGA, and there is so much still to do. I hope you will all stay in touch, keep connected, ask questions and seek out answers. Have a great December!

All the best,
Margaret



Since the last Mountain Bulletin article was published a lot of change has happened in the AMGA. We have hired a new Accountant, Membership Director, and starting in 2010 we will have a fourth full-time employee on staff, a Climbing Instructor Program Director. Our financial situation has rebounded and we are back on track with where we were this time last year. Our 2008 audit was completed and 2010 budget prepared. Two new memorial scholarships have been created to honor the lives of three respected guides, and finally, we bid farewell to a most respected board member as two new elected members and one new appointed Professional Director took their seats during the October meeting.

I would like to take a moment to welcome Josh Harrod and Asha Nagda to the AMGA team. As the new Membership Director and Accountant both Josh and Asha bring a wealth of experience and talent to our association.

In direct response to the growth among the Single Pitch and Climbing Wall Instructor Programs I have decided to bring on a full-time employee to manage these programs in house. Ed Crothers has accepted this position and will now have two titles, Accreditation Director and Climbing Instructor Program Director. Both Discipline Coordinators have done an exceptional job of managing curriculum development, overseeing the processing of course paperwork, and communicating with and providing training for provider pool members, but the programs have grown to the point where it is unfair and unsustainable to rely on the volunteer efforts of Joe Lentini and Adam Fox. The new Climbing Instructor Program Director

will be responsible for managing the Provider Pool, screening provider pool applicants, authorizing and denying exemption from course requests of both the Climbing Wall and Single Pitch Instructor Programs.

I am happy to say our numbers are back on track. May reports showed a 50K shortfall from where we were last year. Today, I can proudly report only a \$2K difference between 2008 and 2009. I feel this is a great achievement considering the economic climate. We can attribute the majority of this financial stabilization to a proliferation in rock and alpine program enrollment.

Membership is on track as well. While we are still showing a \$3K shortfall in Certified Guide membership dues, IFMGA, CWI, SPI and Associate member dues are up by 32%.

The 2008 audit is complete and shows a clean report with only a few managerial suggestions from the auditors. After thorough review the AMGA Board of Directors has approved the 2010 budget and we are ready to start planning for the upcoming year.

Two new scholarships have been created to honor the lives of three professional guides, Doug Parker, Roger Baxter-Jones and Craig Luebben. Contributions for both scholarship funds will be deposited into the restricted AMGA General Memorial Fund and earmarked accordingly to track interest. Both have been set up in perpetuity with the hopes of building a solid enough endowment to eventually offer a full-tuition scholarship from both funds. The Craig Luebben Memorial Scholarship will not be offered until 2011 because we are working on growing the principle so enough interest is gained to substantiate a partial-tuition scholarship.

Kyle and Cindy Lefkoff have committed \$2,000 to help establish this fund. The AMGA is grateful for their support and the support of those who contributed at the Annual Meeting and asks that all members contribute to the fund in whatever way is attainable to each party.

I am excited to welcome Martin Volken, Marty Molitoris, and Kyle Lefkoff to the AMGA Board of Directors. I am highly confident that the special qualities and skills each brings to the table will help the AMGA further its mission and attain new heights.

In closing, as we continue to move forward into 2010 it has become ever more apparent that the AMGA must and will address the access issue that is at the forefront of all our livelihoods and the profession as a whole. After much discussion among the membership, the board, and professional advisors it seems the AMGA needs to refocus its attention and come up with a sound plan for addressing the short and long-term issues around access. Much headway has been made and insight gained thanks to the constructive comments from our membership at the Annual Meeting and from the survey results. The plan has yet to be unveiled to the membership but when the time is right the AMGA will notify its members of its' new and well-defined intentions



ED Corner

by Betsy Novak



Autumn in the desert, such a fine time! The Annual Meeting was, as one might expect of such an event scheduled in Moab, great fun and well attended. We had quite the posse of guides hanging in Indian Creek. In particular, on one day we had lots of folks testing themselves on “Big Baby” (classic off-width in Indian Creek) in honor of Craig Luebben.

Autumn is also a time when we have the Technical Committee (TC) meeting and so it is a time in which we look at many things in the AMGA training and certification program in great detail. I have a number of things to discuss and reiterate. **IT IS ABSOLUTELY VITAL THAT YOU ALL READ, UNDERSTAND AND PASS AROUND THE FOLLOWING INFORMATION!** So much of the misunderstandings and misinformation we become aware of at the AMGA could be avoided if folks would simply read the information put out there for them.

I. As many of you know, we have been having discussions on where we would like certain aspects of our rock program to progress. With the Climbing Wall Instructor (CWI) program and the Single Pitch Instructor (SPI) program, we have seen a need to better fill the gap between the instructor and guide’s track in the rock program. For many guides, living in such areas as the northeast, southeast and even in some areas of the west, the terrain they instruct and guide on is less demanding than the classic rock guide terrain. As such, the rock guide credential is often difficult and or unrealistic for them to achieve. Additionally, there are many folks that found the climbing standard unwieldy for the type of programs they were involved in. In an effort to better incorporate and or attract such guides and instructors to become involved in the AMGA, we have been looking at ways we might alter our programs to get such individuals involved while not compromising the overall nature of our top level programs.

We have toyed with adding yet another program, this was referred to as the Multi-Pitch Instructor (MPI). In thinking of this we considered dropping the Rock Instructor track or just adding this program in between the Single Pitch and Rock Instructor programs. Other ideas included simply modifying the Rock Instructor Course (RIC) track as it already stands without adding the MPI course, to better allow for the in between standard. The issues we were up against in looking at these ideas were:

- A Will adding a new course (MPI) of similar nature to something we already have (RIC) only further confuse members and the general public?
- B In adding this course, what will become of an already successful program, the RIC and Rock Instructor Exam (RIE)?
- C As well, what will become of the Rock Instructor certification and the folks who have gone down this path?
- D Is modifying the RIC, or in other words reducing the level of climbing expected, a good idea?

We the members of the TC have debated this issue for well over a year and decided that it was time to put this issue to rest at this past TC meeting, one way or another. With 12 of 15 members present to help the AMGA with the decision, we were able to come to a unanimous decision. The following is where the program will proceed:

- A The standard for the Rock Instructor course and exam will be modified, individuals coming to the course and exam will be expected to guide and climb on the course and exam at solid 5.9. Folks will still be required to have 5.10 routes on their resume. We will not create a separate Multi Pitch instructor course.
- B We have modified the prerequisites for the RIC, RIE and RGC to reflect this change. Note that the standards and prerequisites for entering the Rock Guide track are essentially the same. The changes are as follows:
 - 1: RIC
 - Climb and guide solid 5.9 at the time of the course
 - 5 yrs. rock climbing experience
 - 50 different multi-pitch trad routes
 - 10 of which are grade III (changed from 5)
 - Grade IV expectation eliminated
 - 10 routes 5.10a or harder on resume
 - 2: RIE
 - Documentation of completion of RIC evaluation recommendations.
 - Complete RIC
 - Since RIC
 - Mock guide 10 grade III routes (Changed from 7)
 - Grade IV eliminated
 - On resume show 10 routes 5.10a or harder
 - Climb and guide solid 5.9 at the time of the course

3: RGC/AE

- Complete RIC
- Documentation of completion of RIC evaluation recommendations
- Climb and guide up to 5.10+ at the time of the course (changed from 5.10c)
- Since completing the RIC:
 - 20 days of multi-pitch grade III or longer
 - 10 trad routes rated 5.10+ or harder (changed 10c to 10+)
 - 10 grade IV or harder on resume, 5 of which must be between RIC and RGC/AE

With these improvements to the program the AMGA office would like to announce an incentive program for current AMGA Certified Rock Instructors that are considering pursuing Rock Guide Certification. We are pleased to announce that we will be offering a 10% discount on AMGA Rock Guide Courses and Rock Guide Exams for current AMGA Rock Instructors through to 31st Dec 2011. This discount cannot be combined with other AMGA discounts i.e employee discount for Accredited Programs.

The following three subjects have already been discussed multiple times in AMGA newsletters. I think it is important to reiterate these items and to explain how they will work.

II. The Aspirant Exam as a part of the advanced courses has been in operation since 2007. Most individuals who come to their final exams in the various disciplines have taken an Aspirant Exam, but not all. In the case of individuals who took their advanced courses previous to the Aspirant program, we have allowed such individuals to be tested on the Aspirant Exam items during their final exam. This method of operation is set to expire as of 2010. This means that all individuals who took courses previous to the Aspirant Exam program will now be required to take an Aspirant Exam before enrolling in an exam. Those without an Aspirant Exam but wishing to examine should consult the office to schedule and Aspirant Exam.

III. I have discussed the merits of venue diversity in the training and certification process. Simply, participants are better prepared and much better guides if they train and have experience in different mountain ranges with different snow packs, different geography and geology, different

continued on page 14



Program Director **Corner**

by Henry Beyer

Much has happened over the last ten months as far as programs are concerned, so I will cut straight to the chase.

Database

One of the biggest changes is the introduction of my.amga.com - the AMGA's new online database. This new system has many nice features including the ability to apply for programs online. Starting with 2010 programs, if you are planning on registering for an AMGA course or exam, you must register online. You also now have the ability to pay for your membership and tuition online. The process is fairly self-explanatory and you will be guided through the steps. However, if you are having trouble with the online registration system, please call the office and we will walk you through the process.

Program Names

There has been a lot of confusion surrounding some program name changes that have taken place recently. This article stands as the definitive statement regarding those changes. Any name changes that have happened over the last few months will be revoked and the original names will be reinstated. The Rock Instructor Course (RIC) will remain the Rock Instructor Course and the Rock Guide Course & Aspirant Exam

(RGC/AE) will remain the Rock Guide Course & Aspirant Exam.

New Rock Instructor Course Standards

Rob Hess, the AMGA Technical Director, has discussed in length the changes made to the Rock Instructor Course (RIC) and Rock Instructor Exam (RIE), so this is merely a re-cap with some additional clarification. The RIC, with its new modifications, will sit between the Climbing Instructor track and the Guide track and serve two purposes:

- It will serve as the preliminary course for those members interested in becoming AMGA Certified Rock Instructors (with it's new modifications). The SPI course and assessment will not be required to take the RIC, however the RIC will serve as an excellent next step for those who are AMGA Certified Single Pitch Instructors and wish to move into multi-pitch terrain, but without the commitment of becoming a full rock guide.
- The RIC will continue to be one of two avenues for those members wishing to enter the Guide track; the Ski Guide Course (SGC) being the other point of entry. As a reminder the SGC is only a point of entry for the Ski Discipline. The RIC is still the port of entry

for both the Rock and Alpine Disciplines.

As Rob mentioned the new standards for the RIC and RIE are as follows (Rob outlines the specific requirements in his Technical Director article):

- You must have 5.10a recreational climbing experience.
- You must be comfortable leading 5.9 trad climbs on a variety of rock types
- On the RIC you will be learning to guide on climbs up to 5.9 in difficulty and Grade III in length.
- On the RIE you will be expected to guide two clients on climbs up to 5.9 in difficulty and Grade III in length
- Grade IV or longer climbs will not; I repeat; will not be required for the RIC or the RIE.

With these improvements to the program the AMGA office would like to announce an incentive program for current AMGA Certified Rock Instructors that are considering pursuing Rock Guide Certification. We are pleased to announce that we will be offering a 10% discount on AMGA Rock Guide Courses and Rock Guide Exams for current AMGA Rock Instructors

continued on page 14

Win the experience of a lifetime.

Share your story at MyExperienceMore.com for a chance to win the experience of your dreams.



MyExperienceMore.com

© 2009 W. L. Gore & Associates, Inc. GORE-TEX®, GORE® and designs are trademarks of W. L. Gore & Associates

Once again, the time has come for all interested individuals to apply for AMGA Scholarships. The AMGA has partnered with outdoor industry leaders and private foundations to provide necessary financial support for guides seeking training and certification. The cost of pursuing professional training and certification can often be one of the greatest hurdles for an educator and technical mountain guide. Through the generous donations and continued commitment of members, private donors, and the business community, the AMGA is able to minimize the financial burden of training and certification by offering scholarships and memorial funds.

We encourage everyone to apply and take advantage of these opportunities. We will be accepting scholarship applications from November 1st, 2009 through **January 31st, 2010**. Please note the one exception to the application deadline – Applications for The Chad VanderHam Memorial Scholarship must be received by **January 1st, 2010**.

If you are interested in applying for any of the scholarships offered by the AMGA, you can download the application at: www.amga.com/images/forms/scholarship_application.pdf.

If you have any questions, feel free to contact Josh Harrod at 303.271.0984 or josh@amga.com.

Scholarships Application Process

Please e-mail the application, along with a climbing resumé to the AMGA Membership Director, Josh Harrod (josh@amga.com).

You must be enrolled in an AMGA program for your scholarship application to be accepted.

There is one general application that applies to all scholarships. However, you must submit a separate scholarship application for each program you are enrolled in.

All scholarship applications are due **January 31st, 2010**.

The exception to the above process and deadline is the **Chad VanderHam Memorial Fund Scholarship. Applicants **MUST submit a short video** (no longer than 5 minutes) describing who you are and why you love skiing. Applicants do not need to answer the six questions on the application form. The Deadline for this scholarship is **January 1st, 2010**.**

2010 AMGA Scholarships

- Arc'Teryx Scholarship (Ski Discipline)
- Backcountry Access Scholarship (Ski Guide Course)
- Black Diamond Scholarship (Any Discipline)
- Chad Vander Ham Memorial Fund (Ski Discipline)

- Jim Ratz Memorial Scholarship (IFMGA Certification)
- Julie Cheney Culberson Educational Fund: (Women's scholarship)
- Marmot Scholarship (Any Discipline)
- Marmot Scholarship (Any Discipline)
- Mike Hattrup/XO Net Scholarship (Ski Mountaineering Guide Exam)
- Mountain Hardwear Scholarship (Any Discipline)
- Osprey Scholarship (Any Discipline)
- Patagonia Scholarship (Women's Scholarship)
- Parker/Baxter-Jones Memorial (Rock Instructor, Rock Guide or Alpine Exam, or Ski Mountaineering Guide Exam for IFMGA certification)
- Petzl Scholarship (Any Discipline)
- The North Face Scholarship (Alpine Discipline)
- Walker Family Foundation (Any Discipline)
- W.L. Gore Scholarship (Any Discipline)

2010 AMGA SCHOLARSHIPS



CRAIG LUBBEN

Memorial Scholarship Fund

To honor Craig and his family, and in remembrance of his dedication to the guiding community, the AMGA has set up a scholarship fund in his name. The intent of this fund is to support candidates taking training and certification programs through the AMGA. We must thank Kyle and Cindy Lefkoff for their generous contribution of \$2000 to help establish the fund and also those who made donations at this year's Annual Meeting in Moab, Utah.

Craig was deeply dedicated to education. From formal guiding, instructional books, and classes to informal tips at the crag, countless hours teaching family and friends, and philosophizing over a beer, Craig spent his life expanding the perspectives of those around him. For the past 18 years Craig has been a part of the American Mountain Guides Association starting in 1991 when he became an AMGA Certified Rock Guide. In 1998-2004 he served on the AMGA Board of Directors where he lobbied hard and tirelessly to raise the standards for American Mountain Guides. The AMGA was fortunate to have Craig join the Instructor Pool in 2001 where he influenced the lives hundreds of aspiring guides. Craig was a climbing pioneer who achieved first ascents on rock and ice

in Colorado, Utah, Wyoming, West Virginia, Canada, Mexico, Cuba, Puerto Rico, Cayman Brac, Mona Island, France, China, Italy and Madagascar. He was the master of forbidding off-widths and helped revolutionize climbing by designing the Big Bro expandable tube chock. Craig authored a handful of featured articles, gear reviews, and technique pieces. He has written several instructional climbing books that have helped change the lives of many aspiring and highly experienced climbers. Craig influenced American climbers in so many ways. Craig's passing is a tremendous loss to the AMGA community and the climbing world in general.

If you would like to help pass his legacy on to guides for generations to come, please donate to the Craig Luebben Memorial Scholarship Fund today. Our goal is to raise enough funds to allow us to offer this scholarship in 2011. Any and all support is greatly appreciated.

To donate you can call the AMGA office (303.271.0984) or send a check to:

AMGA
Craig Luebben Memorial Scholarship Fund
PO BOX 1739
Boulder, CO
80306

2009 GRADUATES

2009 IFMGA:

- Adam George
- Julia Niles
- Ben Mitchell
- Jonathon Spitzer
- Joe Stock
- Tom Hargis

2009 Ski Mountaineering Guide Exam Grads:

- Adam George
- Marc Hanselman
- Julia Niles (IFMGA)
- Ben Mitchell
- Jayson Simons-Jones

2009 Rock Instructor Exam Grads:

- Johann Aberger
- Derek Doucet
- Emilie Drinkwater
- Loren Erickson
- Caleb Padgett
- Anne Parmenter
- Jamie Pollitte
- Brent Prough
- Hiapo Emmons-Shaw
- Eli Simon
- Matt Shove
- Massey Teel
- Mark Vermeal
- Eric Waldron

2009 Rock Guide Exam Grads:

- Mark Allen
- Josh Beckner
- Mike Bromberg
- Alexis Finley
- Caroline George
- Andrew Councill
- Dustin Dearborn
- Karsten Delap
- Peter Fasoldt
- Seth Hobby
- Eric Larson
- Forest McBrian
- David Merin
- Chris Simmons
- Liz Smart
- Mark Smiley
- Jonathon Spitzer (IFMGA)

- Joe Stock (IFMGA)
- Chris Werner
- Christopher Wright

2009 Alpine Guide Exam Grads:

- Dave Ahrens
- Nate Disser
- Adam George (IFMGA)
- Caroline George
- Dawn Glanc
- Forest McBrian
- Ben Mitchell (IFMGA)
- Ian Nicholson
- Patrick Ormond
- Mark Synnott
- Danny Uhlmann
- David Vallet
- Kurt Wedberg



The AMGA Creates New Position to Meet Changing Needs

by Josh Harrod

The AMGA is pleased to announce that due to the recent growth within the Climbing Instructor Program we are changing the administrative structure of the Climbing Wall Instructor and Single Pitch Instructor Programs. A new position has been created and we are proud to announce that Ed Crothers has been hired to serve as the Climbing Instructor Program Director. Ed will continue to serve as the Accreditation Director in addition to his new role.

Both Discipline Coordinators have done an exceptional job of managing the Climbing Wall and Single Pitch Instructor Program. Much is owed to Joe Lentini and Adam Fox for all the hours they have devoted to curriculum development, overseeing the processing of course paperwork, communicating with the Provider Pool and for providing IP training to individuals all across the nation. The programs have

grown to the point where it is unfair and unsustainable to rely on the volunteer efforts of these two dedicated leaders to manage the SPI and CWI programs. To address these changing needs of the organization the new Climbing Instructor Program Director will be responsible for managing the programs including; managing the Provider Pool, screening Provider Pool applicants, authorizing and denying exemption from programs and dealing with the day-to-day tasks of insuring these programs run smoothly and professionally. With the Climbing Instructor Program Director taking on these responsibilities the Discipline Coordinators can focus their efforts on maintaining the standards, training future providers and working hand in hand with the Climbing Instructor Program Director.

As the saying goes, we see further when we stand on shoulders of giants. Adam, Joe

and Justin Yates have been those giants and Ed will have his work cut out for him in this new position. The goal is to have as seamless a transition as possible. No doubt there will be some bumps along the way and we ask for your patience as Ed learns the ropes, so to speak. The goal of the Climbing Instructor Program Director position is to grow these programs and set the standards for climbing instruction throughout the United States.

Although the Climbing Instructor Program Director position will not officially start until the first of the year, Ed will take on the responsibilities of the position starting immediately. Please direct questions pertaining to either program that in the past were sent to Justin Yates, Joe Lentini or Adam Fox, directly to Ed at ed@amga.com.

CLIMB NAKED, ALMOST

Petzl's new Focus range of harnesses takes comfort to a new level. The patented Frame Construction maximizes comfort by minimizing pressure points. By eliminating unnecessary foam and webbing, ventilation is increased exponentially. Comfortable, breathable and lightweight...climbing in one of these is like climbing in nothing at all.

womens & mens specific models • DoubleBack buckles for quick, easy adjustment • 3D gear loops in the front & soft loops in the rear • trail-line loop



Picture: Petzl Luna



The Doug Parker & Roger Baxter-Jones MEMORIAL SCHOLARSHIP

We are proud to announce a new scholarship for 2010. The Doug Parker & Roger Baxter-Jones scholarship will be available to any Guide enrolled to take a Rock Guide, Rock Instructor or Alpine Exam, or taking the Ski Exam for their IFMGA pin.

Doug Parker and Roger Baxter-Jones (UK) were committed mountain guides, lost in the mountains years ago, both at a young age. Doug guided for the Skinner Brothers in Pinedale, Wyoming in his beloved Wind River Mountains and was known for his quiet strength, subtle humor, and infectious love of the mountain life. Roger guided in Chamonix and was an early pioneer in Himalayan alpine style ascents of 8,000-meter mountains. "All the way with RBJ" was not just a funny slogan. Roger was not only a world class Himalayan climber but also a modest, thoughtful, and jovial man who loved sharing the mountain experience with others. This scholarship honors their memory as

guides, climbers, and wonderful human beings and was established by Richard Parker - Doug's brother and Roger's friend.



Doug Parker



Roger Baxter-Jones

Richard along with other members from the Parker, Sage and Bostwick families provided a substantial, initial contribution to start the scholarship that will provide partial tuition to future recipients. The inaugural recipient will receive \$2000 regardless of exam tuition. Members of the Parker, Sage and Bostwick families raised this money specifically to honor the first recipient of the Parker/Baxter-Jones Scholarship.

To apply for this or any of our 2010 scholarships, please visit www.amga.com/programs/scholarships.php.

Membership Update

There are a lot of things going on in the wonderful world of Membership these days but for now I would like to steer your attention towards our new online database.

If you have not taken the time to visit my.amga.com, do it now. You can now update your information, renew your membership, print out your membership card, sign up for programs and more, all online. We're hoping to make the AMGA Risk Management Plan available to members via the database in the near future; just the first of several Member benefits you'll be able to access by visiting the site.

The first thing you need to do next time you visit you're my.amga.com page is update your contact information. Please make sure that both the Birthdate and Country fields are filled out completely. Doing this should help alleviate some of the random error messages several of you have been experiencing recently.

We've been busy working out some of the quirks in the system and I think we've found and fixed most of them. I ask that if you notice something a little off or experience any random errors, please let me know so we can get it fixed right away.

That's all for now. Cheers. Josh

BROOKS-RANGE
MOUNTAINEERING
www.brooks-range.com

QUALITY BACKCOUNTRY GEAR MADE IN THE USA.

**ULTRALITE™
RESCUE SLED**

**SHARKTOOTH
SHOVEL**





Tom Hargis Achieves IFMGA Status

by Josh Harrod

One of the many highlights of our Annual Meeting Main Event was Tom Hargis being called up to receive his IFMGA pin. Though a bit unexpected, it should come as no surprise. When a few senior members of the Technical Committee proposed the idea of granting Tom IFMGA status, the response from the group was a resounding yes. Tom has dedicated over thirty years of his life to guiding. He played a central role in the development of the AMGA Rock Program, helping to establish and maintain a standard concurrent with the other IFMGA nations.

Tom's resume speaks volumes. He has done extensive climbs in Canada and U.S., including five routes on El Capitan and many ascents in the southwest. He has led expeditions and guided in Peru, Ecuador, Argentina, and Mount Rainier as well as Uzbekistan, Aksu and Asan-Usan valleys in Kyrgyzstan. He completed the first ascent of northwest ridge of Gasherbrum IV in

Pakistan and is the only American to summit Gasherbrum IV. Tom has been to Everest and Gasherbrum II, guided Pik Communism, Pik Lenin, Pik Korzhenevskaya, and Khan Tengri (Kyrgyzstan). He was the recipient of AMGA Lifetime Achievement in Guiding award in 2004. He is an examiner and instructor in AMGA Rock and Alpine disciplines, an AMGA Certified Alpine and Rock Guide, and now an IFMGA Certified Guide.

Marc Chauvin did a great job of summing it all up when he said, "Tom reached IFMGA status by bridging the generational gap in guiding. Not only does he give his all on the courses and exams, he also incorporates new techniques and methods in his guiding that he's learning from the younger guides. Those who have gone through the certification process are inspired by his skill and his willingness to continue to learn."

Congratulations Tom!

Marmot® FOR LIFE

Photo: Miles and Liz Smart Collection

Check out our cutting edge line of alpine packs. Tested and abused daily by Exum Mountain Guides in Grand Teton National Park.

EXUM
MOUNTAIN GUIDES

marmot.com

PEOPLE / PRODUCT / PLANET™



AMGA Program Schedule 2010

COURSE AND AREA:	Date:	Ratio:	# of Days:	Cost:
SKI DISCIPLINE:				
S1: SGC - Aspen, CO	1/25-2/5	5:1	12	\$2,200
S2: SGC - Cascades, WA	2/9-20	5:1	12	\$2,200
S3: SGC - Salt Lake City, UT	3/17-28	5:1	12	\$2,200
S4: SMGC/AE - Canada	3/29-4/7	4:1	10	\$2,200
S5: SMGE - Canada	3/29-4/5	4:1	8	\$1,700
S6: SMGC/AE - Valdez, AK	4/19-28	4:1	10	\$2,200
S7: SMGE - Valdez, AK	4/19-26	4:1	8	\$1,700
S8: SGC - Jackson, WY	12/11-22	5:1	12	\$2,200
AE Re-exam	Aspen TBD			
ROCK DISCIPLINE:				
R1: RGC - J Tree, CA	3/17-26	3:1	10	\$2,000
R2: RIE - J Tree, CA	3/29-4/3	2:1	6	\$1,600
R3: RGE - Red Rock, NV	4/5-10	2:1	6	\$1,600
R4: ARGCAE - Red Rock, NV	4/12-21	3:1	10	\$2,000
R5: RIC - Smith Rock, OR	4/20-29	3:1	10	\$2,000
R6: RGC - Boulder, CO	5/10-19	3:1	10	\$2,000
R7: RIE - Boulder, CO	6/14-19	2:1	6	\$1,600
R8: RIE - N. Conway, NH	8/29-9/3	2:1	6	\$1,600
R9: ARGCAE - Boulder, CO	9/6-15	3:1	10	\$2,000
R10: RIC - N. Conway, NH	9/7-16	3:1	10	\$2,000
R11: RIC - North Carolina	10/4-13	3:1	6	\$2,000
R12: RGE - Red Rock, NV	10/6-11	2:1	6	\$1,600
R13: RGC/AE - Red Rock, NV	10/13-22	3:1	10	\$2,000
R14: RGE - Red Rock, NV	10/13-18	2:1	6	\$1,600
R15: RIC - N. Conway, NH	7/19-28	3:1	10	\$2,000
AE Re-exam	4/1-3 RR, 9/2-4 Bldr, 9/21-23 RR			
ALPINE DISCIPLINE:				
A1: AGC - RMNP, CO	6/2-11	3:1	10	\$2,000
A2: AGC - Jackson, WY	6/14-23	3:1	10	\$2,000
A3: AAGC/AE - Cascades, WA	8/2-13	3:1	12	\$2,200
A4: AGE - Cascades, WA	8/16-25	2:1	10	\$2,000
A5: AAGC/AE - Cascades, WA	9/13-24	3:1	12	\$2,200
A6: AGE - Cascades, WA	9/13-22	2:1	10	\$2,000
AE Re-exam	5/27-29 Bldr, 9/9-11 Cascades			
ICE CLIMBING MODULE:				
I1:ICTC -- N. Conway, NH	2/4-8	3:1	5	\$1,000

SGC= ski guide course
 SMGC/AE= ski mountaineering guide course and aspirant exam.
 SMGE= ski mountaineering guide exam.
 RGC= rock guide course.
 ARGCAE= advanced rock guide course and aspirant exam.

RGE= rock guide exam.
 AGC= alpine guide course.
 AAGC/AE= advanced alpine course and aspirant exam.
 AGE= alpine guide exam.
 ICTC=ice climbing training course

Climbing Instructor Program Director

Brave New World

by Ed Crothers



My world has been rocked. In early October Betsy informed me that the administrative structure of the Single Pitch Instructor and Climbing Wall Instructor Programs was being overhauled and new position, Climbing Instructor Program Director, was going to be established. The intent was to have a person in the AMGA office attending to all the administrative needs of both these programs. Betsy offered me the job. It took me a lot of soul searching. Was I willing to give up time in the field for a desk and computer? A number of threads in my life were coming together and it became clear to me that this was an outstanding opportunity and an opportune time. I accepted. Suddenly my plate has become full to overflowing. Along with my responsibilities as Accreditation Director, this new position comes with a steep learning curve, but I knew that when I signed on.

(RIE), so this is merely a re-cap with some So, why was this position created? For 2 years the Board of Directors has wanted to take a good deal of the burden off the two individuals running both of these programs. As volunteers, Adam Fox and Joe Lentini have donated countless hours to administering the Single Pitch Instructor and Climbing Wall Instructor programs, respectively. Under their guidance both of these programs have experienced enormous growth over the past few years. The point had been reached, some would say exceeded, where the

AMGA was asking too much of these dedicated volunteers. Both of these guys will maintain a leadership position with these programs - Adam as Discipline Coordinator for the SPI and Joe as Discipline Coordinator for the CWI. My responsibilities are to attend to the myriad of administrative tasks required to keep both programs running smoothly. These tasks include, but are not limited to, scheduling trainings, processing applications, tracking the finances, answering email and phone inquiries, and reporting to the Executive Director and Board of Directors. Questions or requests for information you have directed to Adam or Joe should now be directed to me. Also, along with Rob Hess, I will be working with Adam and Joe developing course and training curricula.

Combined with managing a growing Accreditation Program, life in my corner of the AMGA is busy. No complaints. I work with a dedicated, dynamic, and talented group of people. Issues that will shape the organization far into the future are being debated and implemented. The AMGA is an exciting place to be right now and I am psyched to have the opportunity to make a contribution.

To SPI and CWI Providers

Thanks to all of you for your support and encouragement. I will do my best to keep things from slipping through the cracks, but inevitably glitches will surface. Bear with me as I work to get a handle on this job. While I have your

attention, here are some program updates:

- Hardcopy of course materials will no longer be accepted. Using my.amga.com to put your information directly into the database is huge. It makes managing an incredible amount of data more efficient and it is the green thing to do. Some of you have experienced technical challenges; just goes with learning and working with a new system. Contact the office and we will help you work through the glitches.
- In the near future, you will be able to pay for courses and assessments online.
- While on the subject of payments, a new office policy has been implemented that requires that we destroy credit card information once the payment has been processed. Less than ideal, but it is viewed as a way to protect your confidential information. So, I will send an invoice and request that you call in with your credit card information. This should be a short-lived inconvenience that will be resolved when the online payment option is available.
- 2010 Provider Contracts should be sent out within the next month. Please read the contract carefully; there will be changes from past contracts.

That's it for now. Have a great winter.

2009 Annual Meeting Was a Success!

MOAB, UTAH



S1
SCANNER
VERSION 2.1

Every second counts...



ORTOVOX

The world leader in backcountry safety equipment.



Fully automatic switch over: transmit/scan



Detailed situation analysis at a glance



Accurate navigation by means of bearing line and direction arrow



Intuitive, visual pinpoint search: fast and precise



Manage transceiver functions - print activity with NEW 2.1 software

www.ortovox.com

Contact: 801-886-8047; In Canada 403-238-8944

Acknowledgment of Outgoing Board Member

ANGELA HAWSE



Angela Hawse has been a full-time guide for 20 years. She is an AMGA Certified Rock and Alpine Guide and has a diverse background in teaching and guiding throughout the US, Alaska, South

America and Asia. Her tireless dedication and commitment to the AMGA has been revealed over the past six-years while serving on the Board of Directors. She is greatly responsible for helping the AMGA raise the standard and quality of the educational methodology of our programs and is responsible for strengthening the nominations process used to attract potential upstanding board nominees. Not only that but Angela did an incredible job representing the interest of guides while serving as the Vice President of the AMGA and as Chair of both the Membership and Nominations Committees.

After serving two terms Angela has invested many hours into making the AMGA a better organization and no doubt has she left her mark. The AMGA is grateful for all of Angela's hard work. A huge thanks is in order and although Angela received a resounding applause of appreciation from the attendees at the AMGA Annual Meeting Main Event, I encourage us all to take a moment to thank our past and present board members for all that they do for our organization.

Thank you Angela- you will be dearly missed.

We support Guiding.

Because you are an AMGA Certified Guide, your clients receive a

15% discount

on any needed items from your trip gear list.



See our Guide & Client Discount Program for details at www.bradleyalpinist.com

ICE CLIMBING ANCHOR STRENGTH: AN IN-DEPTH ANALYSIS

by J. Marc Beverly, BS-EMS, M-PAS, Certified Rock and Alpine Guide Stephen W. Attaway, PhD

Abstract:

Ice climbing anchors are seemingly simple, yet have a mystique that surrounds their use and overall strengths. Not all ice climbing anchors are used in a standard configuration. Placing an ice screw into an already existing ice screw hole is called re-boring. Re-boring of ice screws is a common practice among ice climbers. Re-boring is typically preferred when placing a screw to avoid creating adjacent holes that could serve as a potential fracture propagation point.

We evaluated re-boring strengths for several ice screw designs to determine the strength as a function of length of screw. Slow pull tests were performed, and the results were compared with prior data from drop testing on ice screws. Static pull testing using lake ice was compared with drop testing on waterfall ice and found to be a good substitute test medium. In addition, we evaluated Abalakov anchors (a.k.a. V-thread anchors), with 7mm Perlon cord as well as 1" tubular webbing in different configurations. Their strengths were then compared with that of the single re-bored ice screws. The nature of ice is a continually changing medium and hard to predict in the field. However, the actual strengths shown from our testing methods in the real-world environment make a strong case for the strength of re-boring. Recently, re-bored holes in a freezing environment were found to be strong enough in most configurations. Abalakov ice anchors were also found to be strong, provided that enough ice area was enclosed by the anchor. Placing Abalakov anchors vertically appeared to be stronger than placing them horizontally. Precautions and recommendations for use of ice climbing anchors stem from our evaluation of the data.

I. INTRODUCTION

Ice climbing anchors have traditionally been shunned as not being strong anchors, especially when compared to rock. Perhaps, this arises in part from the fact that ice is a poorly understood medium and has a mystique about it due to its perceived unpredictable nature at times. In technical ice climbing, the technique of re-boring (Figure 1) has been utilized over the years. Several legitimate scenarios exist for re-boring an ice screw. Finding a good placement for an ice screw is often difficult. With the advent of more traffic on ice climbs, the usual "easy" ice screw placements may have already been used. What remains is the conundrum of choosing where to place a screw. One option is to place a screw into an already existing hole that was created by a previous ice climbing party. That hole is an uncontrolled factor as to what type of screw was used initially, when it was drilled, and what environmental conditions have occurred since the hole was left behind.



Figure 1 Placing a screw into an existing hole is called re-boring.

Another scenario that often occurs is when an ice climber may be leading a pitch of ice at their difficulty threshold, finds an old hole that appears to be usable, and wonder if it is reasonable to use that hole. A dull screw that doesn't "bite" into the ice to start a new hole is always problematic. Time can be of the essence when the climber loses all strength and risks a dangerous fall. Re-boring an ice screw seems to be a quick alternative to creating an entirely new hole and can save the climber strength by decreasing the amount of time spent to place a fresh ice screw. Other legitimate scenarios exist for re-boring an ice screw. The above are merely examples and are non-exhaustive. Much conjecture has been created, leading to dogma, about how good these placements are or are not. We now know that "psychological protection" (a piece of protection that the climber may think dubious) produces less of an impact force on the system, even if a piece fails, rather than just climbing quickly for the belay stance. "Running it out" produces larger forces than a fall that pulls out a piece of protection because of the residual fall factor after a failed anchor point. We also know that air pockets (not aerated ice) near ice screw placements are bad and cause fracturing of the ice more readily. Ice is a difficult medium to understand, and its fracture mechanics can be explained to a certain degree, but inherently, it is not possible to anticipate the nature of fracture, propagation, and collapse in the field as yet. Other types of ice anchors exist, such as the bollard and Abalakov. The bollard is fairly passé and somewhat dangerous on ice, because of decapitation and slipping, but it is used in the alpine environment. The threaded Abalakov, however, is used extensively.

Threaded Ice Anchors: Abalakovs (a.k.a. V-threads)

Vitaly Mikhaylovich Abalakov, a Russian, is credited for the innovation of drilling into the ice in two places, such that the two drilled holes would come together as far back as possible to create a continuous hole. A rope or piece of cord could then be threaded through and used as an anchor, as shown in Figure 2. This technique is

also commonly known as a "V-thread." With it, a climber can retreat without leaving much, if any, gear behind, thereby being able to abseil many pitches in a row. Commonly, climbers will leave a piece of webbing or cordage behind in the anchor so that climbing ropes do not become stuck in the back of the Abalakov. At other times, the V-thread is used as an anchoring point for climbing competitions, rescue anchors, top rope anchors, or other applications.



Figure 2 shows a traditional horizontally made Abalakov ice anchor.

Anchor strength studies were first evaluated and published in Canada by Joe Josephson. Since then, many people have accepted that the Abalakov anchor as a standard rappel anchor for descent from ice climbs. The pendulum then swung in public opinion that the Abalakov was stronger than an ice screw. This led to the idea that an Abalakov anchor was strong enough to belay from in the multi-pitch climbing environment.

IV. METHODS

We did slow pull tests on ice screw re-boring configurations based on ice screws placed at a positive angle relative to perpendicular of the ice face. This positive angle is considered the proper configuration for lead climbing. Slow pull test in accordance with the Cordage Institute standard rate of pull of 0.5"-1.0" per second powered by a hydraulic ram was used for pull testing of the screws and threaded anchors. Our drop testing was performed at the Ouray Ice Park, Colorado. Two routes were used to perform the drop testing on, both located at the Lower Bridge: *Rhythm Method* WI5 (the same route that we used in 2005-06), and the *2008 Competition Route* (on the ice section between the mixed rock climbing and the diving board) that had not been used by any ice climbers prior to our testing. This site provided a good control area. The two routes are on distinctly different aspects in the Uncompahgre Gorge in order to get a better sampling of the ice at the Ouray Ice Park.

Re-bored Ice Screw Results

A statistical comparison of drop test results and

continued on page 12

slow pull testing is presented in Table 1. These results indicate drop tests on waterfall ice and slow pull tests on lake ice produced similar results.

A very high failure strength (22.5 kN) for a re-bored ice screw was achieved by leaving a re-bored screw overnight with a test mass of 80kg hanging from it for more than ten hours. The temperatures recorded were less than -30°C in the Ice Park that night. There was no evidence of melt-out from the ice screw, even with a test mass hanging from it. This correlates well to Schulson's evaluation that ice becomes stronger (<25% when cooled from -5°C to -20°C).

We tested several different configurations of threaded anchors. Temporal variations were limited by pre-setting all the anchors and pulling each anchor to failure within a couple of minutes of each other. Test results showed that Abalakov anchor strength was a strong function of geometry and orientation.

Ice fails by fracture in zones of tension more easily than in compression^{2,6}. In our testing, the failure mechanisms for Abalakovs and ice screws resulted in a large segments of ice above the anchor point failing in tension. The ice located below the Abalakov and located below the screw are both placed in compression and actually have a higher failure load due to the increased strength of ice under compression.



Figure 11 Differing orientations of Abalakovs vs. total strength with good grouping. (THIS ONE WAS NOT IN THE NEW DOCUMENT)

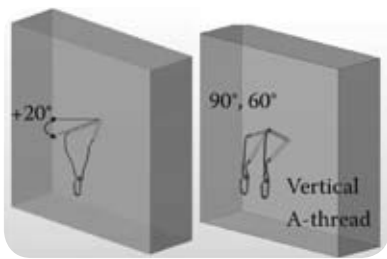


Figure 12 Digital pictograph of the other orientations tested. (left) a V-thread with both holes placed at +20 degrees and adjoining in the back; (right) A-threads (Anderson threads) with the top hole 90 degrees perpendicular and the other using the 60x60 degree method.

Enclosed area is not the only mechanism upon which the strength is based. The strength is also a strong function of the anchor orientation. A vertical (A-thread) placement increases the overall anchor strength.

Drop Testing Statistics		Slow pulls in Lake Ice – ALL Screws	
	kN		kN
Mean	10.6	Mean	11.1
Standard Error	1.3	Standard Error	0.6
Standard Deviation	4.9	Standard Deviation	3.7
Minimum	3.9	Minimum	5.5
Maximum	22.0	Maximum	19.7
Count	15.0	Count	38.0
Confidence Level (95.0%)	2.7	Confidence Level (95.0%)	1.2

Table 1 Re-bored ice screws; all results by testing type.

Redline Failures - Re-bored Ice Screws	kN
Beverly/Attaway 2005-06 - Drop Tests (non-re-bored)	10.14
Beverly/Attaway 2007-08 - Drop Tests	10.58
Beverly/Attaway 2007-08 - Slow pulls Lake Ice	11.09

Table 2 The overall averages of failure forces



Figure 13 (left and middle) strongest orientation; (middle) strongest orientation and material-vertical 1" tubular webbing single loop; (right) weakest of the three, but still strong enough*.

Figure 13 displays the configuration and type of materials used to make the threaded ice anchors. Figure 14 shows how the strongest orientation

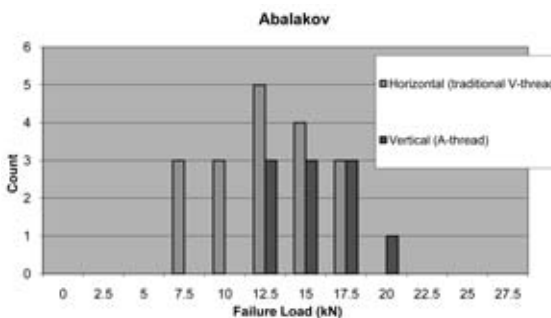


Figure 14 Orientation of Abalakov vs. Strength, both sets of anchors with 1" tubular webbing.

Data for Horizontal (V-threads)		Data for Vertical (A-threads)	
	kN		kN
Mean	11.3	Mean	14.4
Standard Error	0.8	Standard Error	0.7
Median	10.3	Median	14.8
Standard Deviation	3.6	Standard Deviation	2.1
Sample Variance	12.7	Sample Variance	4.6
Range	11.6	Range	6.6
Minimum	5.2	Minimum	10.9
Maximum	16.8	Maximum	17.5
Count	18.0	Count	10.0
Largest(1)	16.8	Largest(1)	17.5
Smallest(1)	5.2	Smallest(1)	10.9
Confidence Level (95.0%)	1.8	Confidence Level (95.0%)	1.5

Table 3 Data comparison of traditionally placed horizontal (V-threads) vs. vertically placed (A-threads).

was in the vertical configuration. This is also outlined in Table 3. From our testing data, 1" tubular webbing tied off with a standard water knot/ring bend was measured to be the strongest on a consistent basis.

The good news is that all of the configurations and materials used were strong enough* to hold abseilers/rappellers with a significant safety margin from a single anchor point. Testing showed that anchors could fail at below expected climber fall (7.5 kN) forces and should be backed up if in any doubt.

Discussion

Using a re-bored ice screw as a first placement off a multi-pitch climb is a sufficient load reduction method that can aid the falling climber from placing the entire impact force on the anchor system that results from a residual fall factor.

The most risk of high impact forces on an anchor/anchor system in climbing is when a climber is starting from a hanging belay. A single ice anchor (screw or Abalakov) is unlikely to arrest a high impact force from a lead climber in this position. In Figure 17, the leader

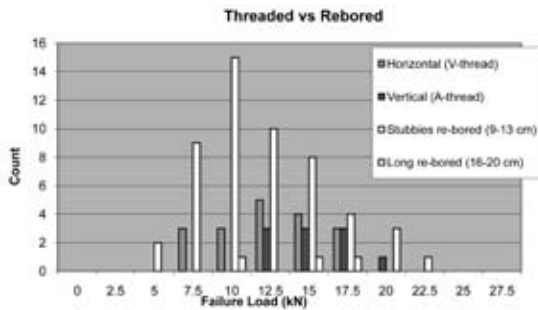


Figure 16 Shows peak force compared to ice anchor type and configuration.

would have been better off not to have clipped the anchor and thereby taking a fall factor of 2, as the rope would place a lesser peak force to the system than in the configuration shown.

Conclusion

These tests were performed in what the authors consider to be “good ice 1.” Lake ice appears to be a good testing medium for comparison analysis to waterfall ice that is homogenous:

- Re-bored ice screws are too weak to withhold a UIAA fall factor all of the time. They are, however, stronger than expected and compare closely with an ice screw placed in virgin ice.
- Re-bored ice screws are nearly as strong as freshly drilled holes. It is likely that any refreezing process that decreases the diameter of the hole over time is of benefit for a re-bored screw.

- A re-bored ice screw that is left in frozen temperatures overnight will likely freeze in quite solid, even with a mass of 80 kg suspended from it, and not experience “melt-out,” even if placed in a positive angle.
- The greater the area a threaded anchor has, the more likely it is to be a stronger anchor. So, save the longest screw for the belay to make a threaded anchor using 60° x 60° x 60° as the best guide line for angle drilling.
- A single ice screw, even a short re-bored screw, is generally about the same in strength as a horizontal Abalakov anchor.
- The longer the ice screw is, the stronger the ice anchor will be, regardless of whether it is a freshly placed screw or a re-bored screw.
- There is no significant difference when comparing the three manufacturer’s brand ice screws when placed into an old hole of the same or different manufacturer.
- Reverse threads did not appear to make a difference in any regard.
- The optimum angle placement is >8° and <16° from our regression analysis.
- The vertical Abalakov is superior in strength to the tradition horizontal or other configurations tested. We call this the “A-thread”, since discussions with Vince Anderson inspired investigation into other configurations.

- Drop Test data on waterfall ice were weaker than Slow Pull test data on lake ice. Rescue anchors for slow pulls will likely act as stronger placements than when climbers fall onto ice screws.
- NEVER use a single anchor (A-thread, V-thread, or ice screw) as the only anchor when high forces are expected, as seen with multi-pitch climbing.

Note: Overdriving (red-lining) ice screws in the drop testing environment is dangerous. Flying ice debris, ice screw missiles, snapping ropes, and the general objective hazard of being in the vertical ice environment, plus having to record data and also be aware of everything else going on, is taxing as well as expensive. Many thanks goes out to Angie Lucht for her help in drop testing and to Nic McKinley for his efficient help on the slow pull tests performed on lake ice.

We humbly and gratefully thank out sponsors PMI Rope, Grivel North America, Petzl, Black Diamond Equipment, Ltd, and the Mountain Rescue Association. Without their help, this research would not have been possible. Also, we thank the Ouray Ice Park for the use of their facilities.

Beverly, M., Attaway, S. Measurement of Dynamic Rope System Stiffness in a Sequential Failure for Lead Climbing Falls. ITRS, 2006.

Schulson EM, Brittle Failure of Ice. Eng Fracture Mechanics 68 (2001) 1839-87.

Joe Josephson. “Ice Anchor Review”, The Canadian Alpine Journal, 76, 1993, pp66-67.

Beverly, M.; Attaway, S. Dynamic Shock Load Evaluation of Ice Screws:

A Real-World Look. ITRS, 2005.


Harmston, Chris. Climbing no 172 (Nov 97), pp106-115


27 meters straight ahead.

Any questions?

Now's not the time to wish you'd read the manual.
Clear distance and direction. Fast processing.
No questions. No bull.


Ease-of-use and proven reliability make the Tracker DTS the most widely used avalanche beacon in North America.





Tracker DTS: ease of use when it matters most.

Pro orders: visit www.backcountryaccess.com/pro, then use **AMGA0910pro** as the coupon code.



Backcountry Access, Inc.
Boulder, Colorado USA
800.670.8735

Program Director Corner continued from page 6

through to December 31st, 2011. This discount cannot be combined with other AMGA discounts i.e. employee discount for Accredited Programs.

New Rock Guide Course Standards

Two changes have been made to the requirements for The Rock Guide Course & Aspirant Exam (RGC/AE). The climbing standard has been changed from 5.10c to 5.10+ and the Grade IV climbs that were previously required for the Rock Instructor Course have now been added to the requirements for the RGC/AE. That means to be enrolled into the RGC/AE you must have 10 Grade IV or longer routes on your resume at the start of the course. Five of these routes must have occurred since completing the RIC.

Ice Track

Again Rob Hess has discussed the particulars surrounding the implementation of the ice-climbing component coming in 2011. In terms of progression through the Alpine Discipline, if you have taken an Advanced Alpine Guide Course & Aspirant Exam (AAGC/AE) by December 31st, 2010 you will be exempt from needing to take the ice-climbing component in order to move on to the Alpine Guide Exam (AGE). (Movement Skills will still be tested at the exam level.) This means the 2010 AAGC/AE will be the last chance to take this advanced level course under the current structure. For anyone who has not taken an AAGC/AE by the end of 2010, the ice-climbing component will be required of any one looking to take an AGC or AAGC/AE in 2011.

So there you have it. There is a lot of information presented between Rob's article and mine, so if you have questions don't hesitate to contact either of us.

Cheers! Henry Beyer, Program Director

TD Corner continued from page 5

weather, different rock, logistics and in all just different problems they must deal with in being in a different location. For these reasons and others, we will be requiring that participants in the ski discipline take their courses and exams in different locations, starting in 2010. Anyone who has already taken the Ski Mountaineering Guide Course and Aspirant Exam (SMGC/AE) but has yet to take the Ski Mountaineering Guide Exam (SMGE) will be required to take the SMGE in a different venue from the SMGC/AE. We at the AMGA will be sure to offer multiple affordable venues to facilitate this process. The long-term goal of the training and certification process is to require this in all disciplines though presently there is no time line for this to occur.

IV. It has become increasingly more difficult to train and assess ice related climbing skills on Alpine programs. This and in consideration of the fact that there are guiding centers that specialize in ice guiding in the US and around the world, we have decided to require an ice climbing component in the Alpine program. In developing this program, we have set ourselves up to add an ice instructor credential akin to the Rock Instructor certification that would be available to guides without going through the Alpine program. This program is set to take place as of the Alpine Guide training and certification season (May) in 2011. This means that there are two more full ice seasons to get this done. All individuals without Aspirant level courses signing up for Alpine programs in 2011 must have this course before continuing. Once this has gone into effect, the structure will be as follows:


- 1 The ice climbing component will be 5-days in length. One day will be omitted from the Advanced Alpine Guide Course and ice skills

will not be tested on the Aspirant Exam.

- 2 Ice skills will be tested on the final Alpine Exam to be sure participants' keep their skill level at the standard.
- 3 Courses will be scheduled in a variety of geographical locations to facilitate the process.
- 4 Prerequisites for the course will be the Rock Instructor Course, avalanche education and ice related personal skills.
- 5 This course will be taken before the first level Alpine course. This will allow us to meet the needs of the Alpine program and will set the structure for an ice instructor program. This structure will allow us to later add an additional Ice Instructor certification and create an Ice Instructor credential that can be completed with out taking Alpine courses.

So there you have it. If you have any questions or need any clarification, please contact myself and/or the AMGA office.

Thanks! Rob Hess



It is a marriage in which the knot is tied with excruciating care.

Conrad Anker, Brady Robinson, and their ultra-durable Caber Hybrid Jackets are up to the challenge. K7, Pakistan. Photo: Jimmy Chin.



NEVER STOP EXPLORING™
www.thenorthface.com

THANKS

To our Contributors!

Diamond Sponsors give over \$10,000.
 Benefactors give between \$2500 and \$9999.
 Patrons give between \$1500 and \$2499.
 Supporting Sponsors give between \$500 and \$1499

Diamond



John and Patty Bicknell | Kyle and Cindy Lefkoff | Gil and Donna VanderHam | LOR Foundation

Benefactors



Patron



Supporting

- | | | | |
|-----------------------------|---------------------------|---------------------------|-----------------------|
| Asolo | G3-Genuine Guide Gear | Lowe Alpine | Rescue Essentials |
| Atlas Snow-Shoe | Garmont | Metolius Climbing | Red Ledge |
| Big Agnes | Gregory Mountain Products | Miller-Mellor Association | Restop |
| Bluewater Ropes | Hacksaw Publishing | Montbell | Sierra Designs |
| Camp UA | John Henry Beyer | Mountain Tools | Sterling Rope Company |
| Deuter USA | Julbo | Omega Pacific | Therm-A-Rest MSR |
| Eider | Karhu | Ortovox USA | Pete Takeda |
| Evolution Insurance Brokers | Life Link | Jim & Chris Pearson | Yates Gear, Inc. |
| Forty Below | Lightship Insurance | Princeton Tec | |



AMGA Mountain Guides Association
PO Box 1739 | Boulder, CO 80306



LIVEWIRE
QUICKDRAWS

Rosie Cahoon, Underdog,
American Fork Canyon, Utah.
LiveWire Quickdraws.
© CORY RICHARDS

BLACKDIAMONDEQUIPMENT.COM/QUICKDRAWS

