

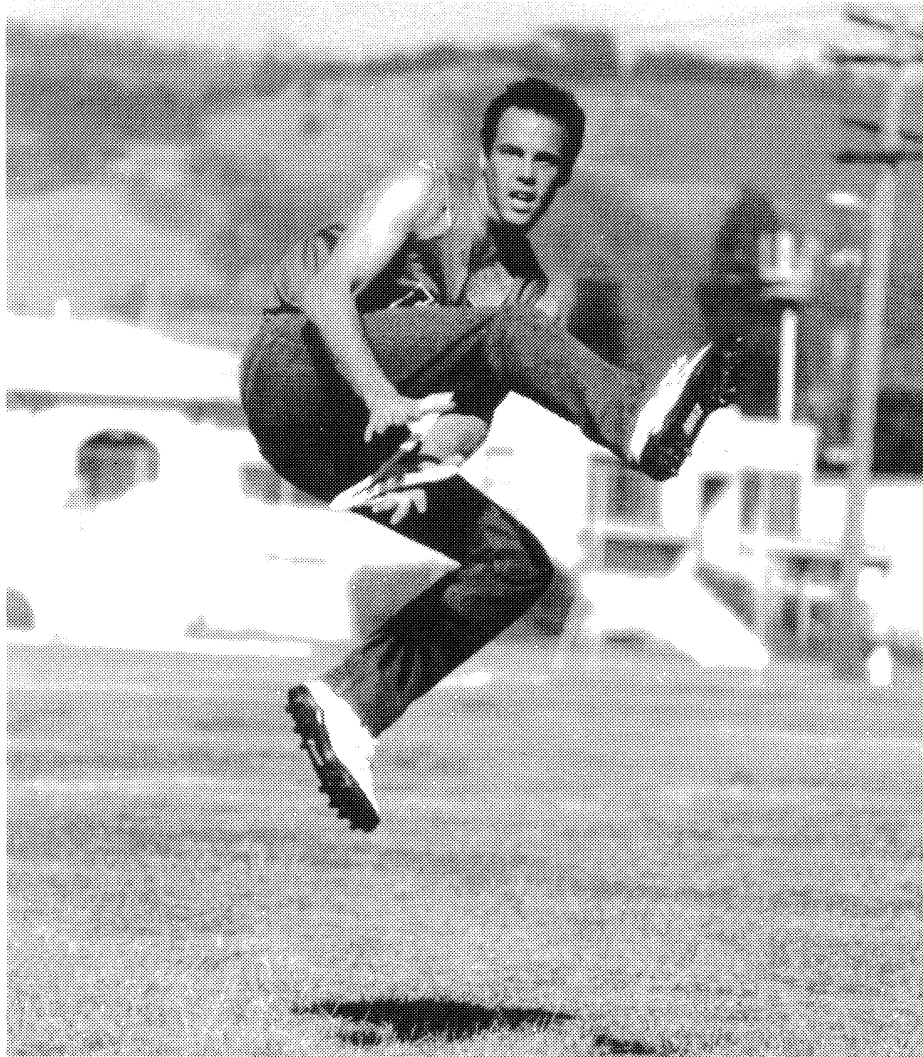
Many Happy Returns

Issue No. 58

An International Publication of the United States Boomerang Association

Spring 1994

SPECIAL "HOW TO" ISSUE



FEATURING: MICHAEL "GEL" GIRVIN



PRESIDENT'S COLUMN

Greetings once again fellow USBA members,

I would like to begin this issue by bringing you up to date on some of the actions which your USBA Board of Directors have taken this term. First of all, as you will see later in this publication, the board has responded to the need for greater participation in the organization by expanding the election process to give the general membership more of opportunity to be involved. The board along with Norm Kern as acting liaison to MHR, are working with editor Jay Emerson to assist in coordination of articles, design and content to provide a more meaningful and enjoyable publication.

The rules committee held extensive and wide ranging discussions with respect to competitive events. The primary focus was on individual rated tournaments. It was the consensus of the committee that before significant changes could be decided upon, more input was needed from those of you who compete at tournaments. The next MHR will include a survey soliciting competitors opinions on tournaments and some ideas for changes and refinements which have been advanced. This, like the expanded election process, is the opportunity all members who have comments or recommendations can express their ideas, so don't miss out!

The only change which will be implemented this year in the individual rated tournaments is making juggling a non-rated optional event; Tournament directors may run the event at their own discretion but it will not be included in the competition for rating purposes. In addition, all Tournament directors are strongly encouraged to incorporate a team event or two into your rated tournament. While a team tournament day following the USBA individual tournament has become fairly common on the west coast, there are other parts of the country where opportunities for participation in team events are not as readily available. Running a team event as time permits at your tournament will add enjoyable variety to the experience at a minimum of additional work for the tournament director. There is a set of team teams rules available through the USBA for all interested parties; contact the USBA at our PO box or "Gel" Girvin at 2124 Kittredge St. #61, Berkeley, CA 94704.

Finally, the board has voted to institute a tournament sanctioning fee. The fee will provide insurance coverage, ratings for each individual USBA rated event, and the Tournament directors packet which will be sent to all tournament directors in the 1994 season. Each director must pay the sanctioning fee by mail to John Flynn in advance of the tournament date in order for your event to be recognized by the USBA. While the exact fee amount has not been determined, it will not exceed \$100 per event. The fee will be listed in the director's packet.

Due to a change in the rate structure for a (900) number, it has become restrictively expensive for the USBA to provide a "Hotline" service. However, the USBA has established a recorded Information Hotline which will be updated by Chet Snouffer. The line will provide current information regarding USBA events as well as membership services. The number is (614) 369-1085.

Once again, I am in the process of preparing and sending out the Toss Host Packets to those if you who will be participating in the third annual USBA Toss Across America on May 21, 1994. This is the one opportunity to come together and bring our sport to the public in a non-competitive demonstrative and teaching context to our communities. Please refer to MHR #56, President's column, for information on how to Host a "Toss" in your community. In addition, if you have not held a "Toss Across America" in the past and wish to do so, please contact me as soon as possible and I will provide you with a Host Packet containing information, flyers and a model press release to aide you in directing your own event.

I look forward to seeing you all on the fields of summer.

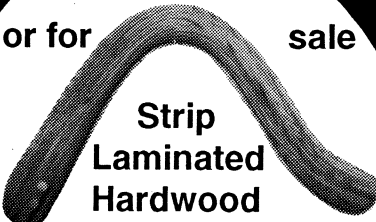
Betsy Lew Miale-Gix

What's In This Issue!

| Page | Contents |
|------|-----------------------|
| 2 | President's Column |
| 3 | USBA Store |
| 4 | Alternate Events Com. |
| 5 | Election Reform |
| 5 | USBA Team Selection |
| 6 | USBA Q&A Column |
| 7 | Boomerang Season |
| 8 | Makin' Bellen Booms |
| 10 | Bits & Pieces |
| 14 | Endurance/FC Ideas |
| 15 | Teaching Workshops |
| 16 | Making Phenolics |
| 17 | What Makes It Special |
| 18 | Booming The Vortex |
| 19 | USBA Information |

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The USBA Store

As promised The USBA Store now carries boomerangs. I currently have Outback (Doug DuFresne) and "Gel" (Michael Girvin) booms in stock.

Scorch the earth in Fast Catch with a *FC III* from Outback. Look up Fast in the dictionary and you'll find a picture of this boom! Tuned, Flight tested and Guaranteed by Doug to liven up your day! \$25.00 plus shipping.

Improve your Trick catch scores with a *Carlotta* from Gel Boomerangs! This is the birch version of this famous tri-blader. The *Carlotta* is designed for easy immensely catchable returns. If you have any doubts, talk to someone who owns one! \$15.00 clear finish, \$17.00 decorated plus shipping.

For a complete list of what is currently available in stock, send a SASE (USA) or \$1 (overseas) to:

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C/O Dean A. Kelly
3350 Neef Ave. SE
Salem, Or. 97302**

Questions? Call: (503)-581-8050

All prices are in \$USA\$ and include Shipping and Handling to the USA or Canada. Overseas orders must include \$2 extra for surface or \$4 extra for Airmail per item. Back issue newsletters are \$1 additional for surface mail and \$2 extra for Airmail.

USBA Store Stock Availability - Prices Each Item:

- \$3.50 USBA Embroidered Patches
- \$1.50 USBA Mylar Decals
- \$6.00 "Boomerang": a book by Ben Ruhe
- \$8.00 "The Big Book About Boomerangs": a book by H. L. Mayhew*
- \$4.00 "The Boomerang": an early pamphlet by B. Ruhe/L. Hawes
- \$2.00 'Low-Reynold-Number Airfoils article
Scientific paper on airfoils
- \$1.00 List of Boomerang Related Patents
- \$2.00 Newspaper Articles from 1984
- \$20.00 Huerer Swiss Digital Stopwatch**
- \$15.00 USBA T-shirts available in sixes: M, L, XL color: gray
- \$12.00 USBA '93 Open T-shirts available in size L only color: gray
- \$2.50 Back Issues of MHR: # 21-W85; #23-Sm86; #26-Sp86;
#27-Sm86; #28-F86; #29-W87; #31-Sm87; #32-F87; #33-W88
#52-F92; #53-W93; #57-W94.

* First edition and signed by the author.

** high quality Swiss made. A \$50 value. Only a couple left.

Orders of \$15 or more are eligible for a free issue of MHR. Please indicate your first and second choices.

NEW FEATURES IN MHR

Chet Snouffer, reigning National Champion and *Competition Editor*, will include a **Question and Answer Column** in each upcoming Issue of MHR. Send in those tough questions and find out what makes the good ones great! See pg. this issue! **MAKE YOUR OWN BOOMS!**

We will feature a "How to" article by some of the most successful boom makers in each issue so you can get out in the garage and start making your own flying sticks. Just follow the easy how to instructions. Great for those who thought they never could! Get the family and neighborhood hooked on Boomerangs!

MEMBER PROFILES

How did you and your friends start throwing boomerangs? What's your job, age, great boom moments? Starting with the Summer Issue, one full page will be devoted to thrower bio's. Interview your friends whether they are beginners or experts, take a pic and send it to the editor. **SHARE THE AIR!**

Gel Booms

10th Anniversary of Gel Boomerangs.

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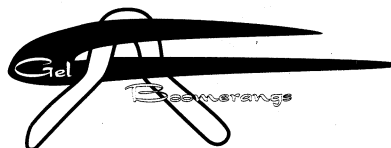
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ALTERNATIVE EVENTS COMMITTEE

By Norm Kern

Betsy Lew has asked me to lead a committee to come up with events which present alternatives to the traditional USBA tournaments. We are looking for events which would involve beginners, or those who have boomerang interest but no competitive interest. We are looking for publicity, demonstration, and teaching formats. We are looking for activities which will promote Boomerangs and the USBA. I will get as many as possible into MHR so that everyone can use them to promote the sport in their home towns.

To get started, I'll talk about the ideas we use in Michigan. We have six or seven events each year.

1. Winter- A dinner at the Aussie Steak House for family and friends.

2. May - Toss Across America- We hold our Toss at a local state park which gets a couple quarter page pieces in the local paper. We have plenty of Boomerangs to loan out and display. Bud Pell explains the competition events while several experienced throwers give a demo, then give lessons one on one to anyone interested. We have booms for sale and free copies of USBA literature and various boomerang catalogs. Bud takes names of everyone who is interested for future events.

3. June- Jay Emerson held the first annual USBA tournament on a Saturday. The Fort Wayne, Indiana tournament was held on Sunday. Having back to back tournaments gave people more justification to travel.

4. June - Summer Solstice throw- On or about the longest day of the year we have an evening throw. We throw until about 11 p.m. by adding light sticks when the darkness finally arrives. For this

throw we make up a boomerang which everyone signs. This boomerang is then awarded to someone who has recently moved away of to someone who has contributed to boomeranging in the Michigan area recently.

5. September - Novice Team Tournament - This event has been described in past issues of MHR. The whole tournament takes only about 3 hours but has 6 events. No markings are required on the field. Every event is designed to be easy enough for a beginner to help the team but challenging enough for veterans to stretch themselves too. I will be happy to supply full rules and score sheets to anyone interested.

6. November - Turkey Toss - This is always the Friday morning following Thanksgiving. Hot chocolate is very popular at the TT. The TT is also a good day for Aussie Round Rag. It requires only a rag and a few good sports. Aussie boomerangs are encouraged but not required. Each person makes a throw from the rag; if you catch, you may take three steps towards the rag. (You can adjust the number of steps according to the range of the boomerang.) If you miss, you leave your boom where it lands. The closest rang to the rag wins the round, which means you go first on the next round. This event has enough competition to keep things interesting but not enough to cause much ill will.

Bud Pell has faithfully maintained a mailing list, which now contains over 50 names. He started with the USBA membership in Michigan and northern Ohio. We have added names from the activities above and from our "friends turned throwers." HE culls names from the list based on lack of demonstrated interest. Bud also does a mailing for each event.

We have had the novice tournament listed in the community paper for the last 4 years. The

paper has a place for listing such activities each week at no charge. We seem to always get a people from that listing. Because we listed our activities, the paper eventually did a full interview and a half page article on us. The article caused a TV station to become interested so we got about 40 seconds on the evening news. Bob Kleiman threw boomerangs in his neighborhood and got the attention of a sports writer in a major Detroit paper. Bob's picture was on the front of the sports section with about a third of a page article.

Bud Pell, Ted Bailey and I have done demonstrations at schools and science camps. Bud has gotten the opportunity through contacts with individual teachers. I have done demonstrations for my daughter's science classes. Ted gets contacts through his work in the NASA publication. Bud has also arranged through State Park authorities for us to demonstrated boomerangs at county and city celebrations and fairs. Bud also set up a display at one of the local libraries where the librarians report the display received more interest than any other display during the entire year!

If you have had success at getting people interested in boomerang please let me know how you did it so we can share the information with other boomerang enthusiasts. Do you teach people how to throw? How do you conduct a lesson? Have you gotten boomerangs on TV or into the local papers? Do you do demonstrations for school, scouts, churches? What do you do to demonstrate or teach? Do you have a faithful group of throwers? Let us know how you do it!!! Send your ideas:

NORM KERN
1640 HAYNES
BIRMINGHAM, MI 48009
Or Call (801) 645-9308

ELECTION REFORM

Announcement to the General Membership.

By Betsy Lew Miale-Gix

For the last several years participation in the USBA election process has been largely limited to those who were able to attend the USBA National Championship Tournament. Accordingly, only a small percentage of the general membership participated as candidates and voters. In keeping with our attempt to reach out to a broader spectrum of you who make up the United States Boomerang Association, your USBA Board of Directors has reformed the election process as follows:

1. All individuals wishing to run for one of the five Board of Directors positions, President, Vice President, Treasurer, Secretary may do so by submitting their name and a accompanying paragraph to the USBA by May 1, 1994. The paragraph would set forth what skill, education or training you possess which makes you qualified for the position as well as your Boomerang experience and intentions should you be elected to the position sought. Your self nomination and paragraph must be received by USBA secretary Gregg Snouffer at PO Box 182, Delaware, OH 43015 by May 1, 1994.
2. The list of nominees with their accompanying paragraphs of qualifications and intentions will be published as an insert to the Summer Issue of MHR. A ballot with the names of all the candidates for the respective positions will be contained in that insert as well.
3. There are two methods by which you may cast your vote

for the officers and board members. You may vote for one candidate for each of the officer positions, and once each for five of the candidates for the Board of Director positions by mail or at the membership meeting at the nationals. If you going to vote by mail, please date and sign your ballot and send it to the USBA secretary Gregg Snouffer at the PO Box no later than August 25, 1994. All ballots received by mail will be opened and tabulated at the USBA meeting during the Nationals.

The officers and directors make up the Board of Directors of the USBA. They are responsible for the management, control, and direction of all corporate activities and policies of the USBA in advancing the competition, art and science of Boomerang throwing. The five directors at large participate in setting the regulations and policies of the USBA, serve on committees and do whatever other work is deemed necessary for the USBA. All positions entail a commitment of time and energy, both written and verbal correspondence and decision making capabilities are required.

All of the USBA officers must perform general duties, and communicate, discuss and vote on board matters. The president of the USBA, the chief executive officer of the USBA, is responsible for presiding at meeting of the USBA, coordinating the execution of USBA business, seeing that the duties of the other officers and directors are performed, and establishing the committees. The vice President's primary obligation is selecting the sight for the following years National Tournament. The Vice President is also responsible for publicity and promotion of the USBA.

The treasurer is the chief financial officer of the USBA and is responsible for all record keeping related to the USBA finances, collections of USBA dues and other

funds, providing a full comprehensive financial report to the board and disbursement of funds authorized by the board.

Finally the Secretary is responsible for maintaining the membership roles of the USBA, keeping minutes of corporate proceedings, keeping the official records of the USBA and performing other administrative functions as necessary.

Once again, all of these positions carry with them a significant voluntary contribution of your time and energy to the USBA and are not to be undertaken lightly.

USBA TEAM SELECTION

By Michael Girvin

The USBA formed a selection committee to pick the National Boomerang Team that will go to Japan for the World Championships in August. Michael Girvin, Chet Snouffer, John Flynn, Mark Weary and Will Gix served as that committee. The committee used the following data to select the Team. 1991-1993 USBA official rankings, 1993 Official Adjusted Rankings (Ratings adjusted to simulate World Championship Events; minus Juggling, Trick Catch and Doubling added together and divided by two,) 1989, 91, 92 Team World Championship Results, and all Official Tournament results from 1993. After four months of debating the committee selected **Chet Snouffer, John Flynn, Michael Girvin, Gregg Snouffer** and **Casey Larrance** to represent the United States at the World Championships. The first, second and third alternate throwers selected are **Mark Weary, Doug DuFresne** and **Steve Kavanaugh**.

The USBA

Q

&

A

Column

*...because enquiring minds
want to throw.
by Chet Snouffer*

Boomers' cancer risk skyrockets

By DAVID BROWN
Washington Post
WASHINGTON — A white man of the baby-boom generation has about twice the risk of developing cancer as his grandfather, and a white woman of the same age has about a 50 percent greater risk than her grandmother, according to a new study.

Dear USBA,

The headline above appeared in the Fort Wayne Journal-Gazette. I was greatly concerned! Does this mean the surgeon general should look into our sport? Do people like you who actually practice have a greater risk than others who do it only for fun? It also references "baby boomers". Does this mean we shouldn't throw roomerangs or other indoor versions? I would appreciate it if you would look into this vital matter.

Sean
Team Thuba

Dear Sean,

Wow. Scary article. Thanks for sharing your concerns with us. A little known rule for the Q and A column is that each letter writer only gets one question per issue. Since you have raised several here, we had to select what we felt to be the most burning issue raised by your request. Therefore, we must reassert once and for all that playing with roomerangs and backyard models definitely increases the risk of scorn and derision from true aficionados of the stick, unless the roomerang weighs in at over 100 grams and measures over 100 cm from tip to tip, in which case it would count in certain parts of France. We hear you can obtain some like this from the northern Ohio region.

Dear USBA,

My boomerang bag got wet recently and several of my prize sticks along with it. I set them out to dry but found that some warped in the process and will not fly the same. Is there a way to reset the tune so that the original flight characteristics are regained or must I order new ones?

-Jay Emerson, Michigan

Dear Jay,

After checking with several boom manufacturers who unanimously chimed, "BUY MORE!" we became suspicious and decided to check with Eric Darnell. He is a master with natural wood elbows and tuning boomerangs. His suggestions:

"You have two options: steam heat or dry heat. I prefer dry heat because moisture is what started the problem in the first place. Use a gas or electric stove burner and hold boomerang above the heat so

as not to scorch it. Hold steady pressure to set the tune. You'll be able to feel when the boom becomes "rubbery" and you can set the tune. Hold the tune until it cools then the set should be permanent.

A good rule is to always start by tuning back to flat and then seeing what, if any, additional adjustments need to be made. Since you don't necessarily know the details of the original tuning, start by going back to flat. You can clamp to a ruler or straight surface."

Dear USBA,
Explain why dihedral has the influences it has. I know what they are, but I want to know "why"?

Norm Kern, Michigan

Dear Norm,

Great question! As a USBA Board member we know you're used to *waiting* for replies, so we're not worried about holding your answer until next issue (this is known as a "tease" in the entertainment industry. "Will Norm discover Di's inner secret? Stay tuned until next time when...")

Actually, your letter came at deadline so we're going to contact Rusty Harding, Ted Bailey and other aero geniuses and will have the answer next issue. Meanwhile, throw for fun.

If you have questions for the USBA Q and A Column (both real and surreal) send them to 51 Troy Road, Delaware, Ohio 43015. We'll track down the answers from the experts and let you know the results.

BOOMERANG SEASONS '94

APRIL 16 & 17, OAKLAND, CA - TEAM GEL TOURNAMENT. CONTACT MICHAEL "GEL" GIRVIN at (510) 658-2469.

APRIL 30, SWAINSBORO, GEORGIA. CONTACT JOHN DERDEN at (912) 237-7207.

MAY 21, TOSS ACROSS AMERICA. COMING TO A FIELD NEAR YOU!!

MAY 29 & 30, ST. LOUIS GATEWAY BOOMERANG CLASSIC. CONTACT TOM FITZGERALD at (314) 839-1604.

JUNE 18 and 19. THE GREATEST WEEKEND OF BOOMERANGING COMES TO YOU FOR THE SECOND STRAIGHT YEAR WITH THE 2nd ANNUAL MIDWEST BOOM-A-THON

JUNE 18, FORT WAYNE, IN CONTACT SEAN MARQUARDT at (219) 486-0503.

JUNE 19, 2nd ANNUAL MICHIGAN BOOM BASH.

CONTACT JAY EMERSON at (313) 416-0966.

This is great opportunity to throw in two rated events in the same week-end. The drive is less than 3 hours, and Jay and the Thuba gang will provide all the verbal

abuse you can take at no extra charge. Make your plans now to be part of the fun!!

JUNE 25, MOHICAN WILDERNESS WORKSHOP AND TOURNAMENT at MOHICAN WILDERNESS CAMPGROUND, OHIO. CONTACT CHET SNOUFFER at (614) 363-8332.

JULY 2, MONTREAL, CANADA. CONTACT STEPHANE MARGUERITE at (514) 597-1333.

JULY 16, MERIDEN, NH. SITE TBA. CONTACT JOHN FLYNN at (802) 296-2158

JULY 16 & 17, OAKLAND, CA. THE 2ND GEL TOURNAMENT. CONTACT GIRVIN at (510) 658-2469.

JULY 24, SALEM OR. CONTACT DEAN KELLY at (503) 581-8050.

AUGUST 27 & 28, 15th ANNUAL FREE THROWERS FLING at MINGO PARK IN DELAWARE, OH. CONTACT CHET SNOUFFER at (614) 363-8332.

SEPTEMBER 3 & 4, US OPEN. CONTACT BUD PELL at (313) 421-5341.

SEPTEMBER 5, US NATION-

ALS, IN JACKSON, MI. CONTACT BUD PELL. (See Above.)

SEPTEMBER 10, HARTFORD BOOM CLASSIC, HARTFORD, CT. CONTACT PAUL SPRAGUE at (203) 421-4330.

SEPTEMBER 18, SUMMER'S FINAL FLING. CONTACT DOUG DuFRESNE at (503) 942-3167.

OCTOBER 15 & 16, PHOENIX, AZ. WILDMAN MARK WEARY HOSTS THIS RECORD SETTING EVENT. (See MHR #57) CONTACT MARK at (602) 759-3973.

Remember the new USBA Tournament/Info Hotline.

Call (614) 369-1085

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7 days a week

for compete, up-to-the-minute tournament information.



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HOW TO MAKE THE BELLEN BOOMERANG

by Michael "Gel" Girvin

The Bellen is an accurate boomerang that is easy to catch. The bell shaped elbow causes the center of mass to be close to the elbow. This is the reason the boomerang is easy to catch. The Bellen boomerang is a great all around boomerang for beginners, or experts. Not only is it the best selling beginner boomerang from Gel Boomerangs, but it is also an expert's boomerang that has been used to set several world records. The diagrams below show you how to make 5 ply or 10 ply Bellen. If the Bellen is made from 10 ply 5mm aircraft birch plywood it will have a nice hover and is good for trick catching or juggling. If it is made from 5 ply 1/4 inch aircraft birch plywood it is a more accurate boomerang and has less hover. With either version you get a versatile, easy-to-catch boomerang.

The seven steps below will provide you with all the information necessary to make the two Bellen boomerangs.

1) You need wood. You can phone around locally and ask for either 5 or 10 ply aircraft birch plywood. If you can't get it locally, you can write to the USBA and they will send you a list of wood sources. I would recommend Anderson International. You can phone them toll free: 800-454-6270.

2) Trace the boomerang shape onto the wood. Each square in the grid behind the boomerang represents one square inch. You can re-draw the plan onto one square inch graph paper, or you can take this page to a copy store and enlarge it so that the boxes on the copy are one square inch.

3) Cut your boomerang out. A hand coping saw, jig saw or band saw can be used. I use a band saw. But the jig saw is generally a

tool that more people own. If you do not own a jig saw, Black and Decker makes an inexpensive jig saw that is more than adequate for making boomerangs. I started making boomerangs with such a tool. A thin blade with 10-20 teeth per inch will cut cleanly without much chipping.

4) Sand the airfoils. There are many ways to sand the airfoils: hand files, electric drills with sanding disc attachments, grinder/sanders, air-filled cushion contour sanders, etc. I use a Makita GV 5000 sander. It is a medium priced tool that spins at 4500 RPMs. It may be too fast for first time makers. I started with a drill and a sanding disc attachment. Such a set-up works fine and is relatively inexpensive. Black and Decker offers an inexpensive drill. For either the drill/disc or sander, 80 grit sanding discs work well. Also, hand files will work just fine for carving airfoils.

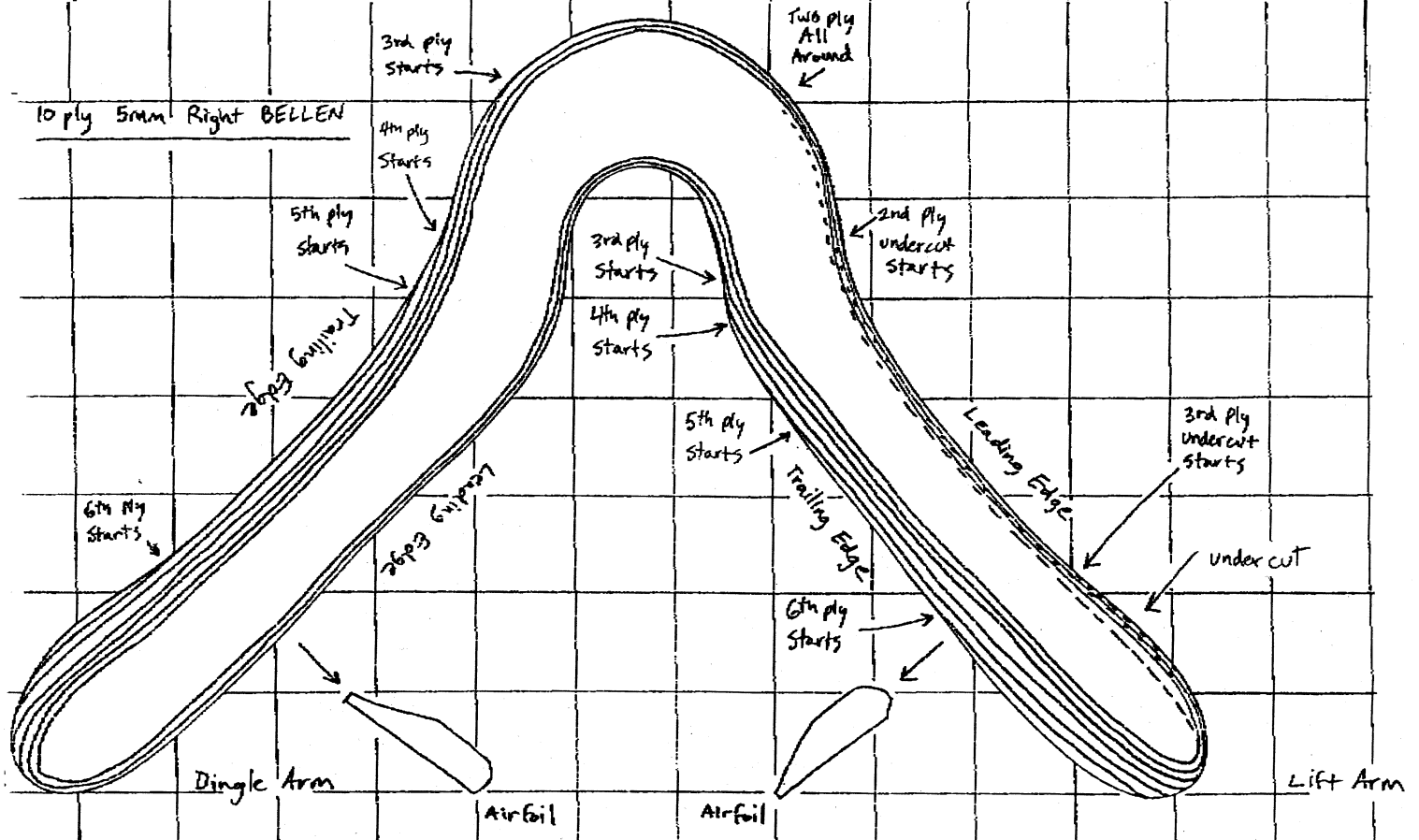
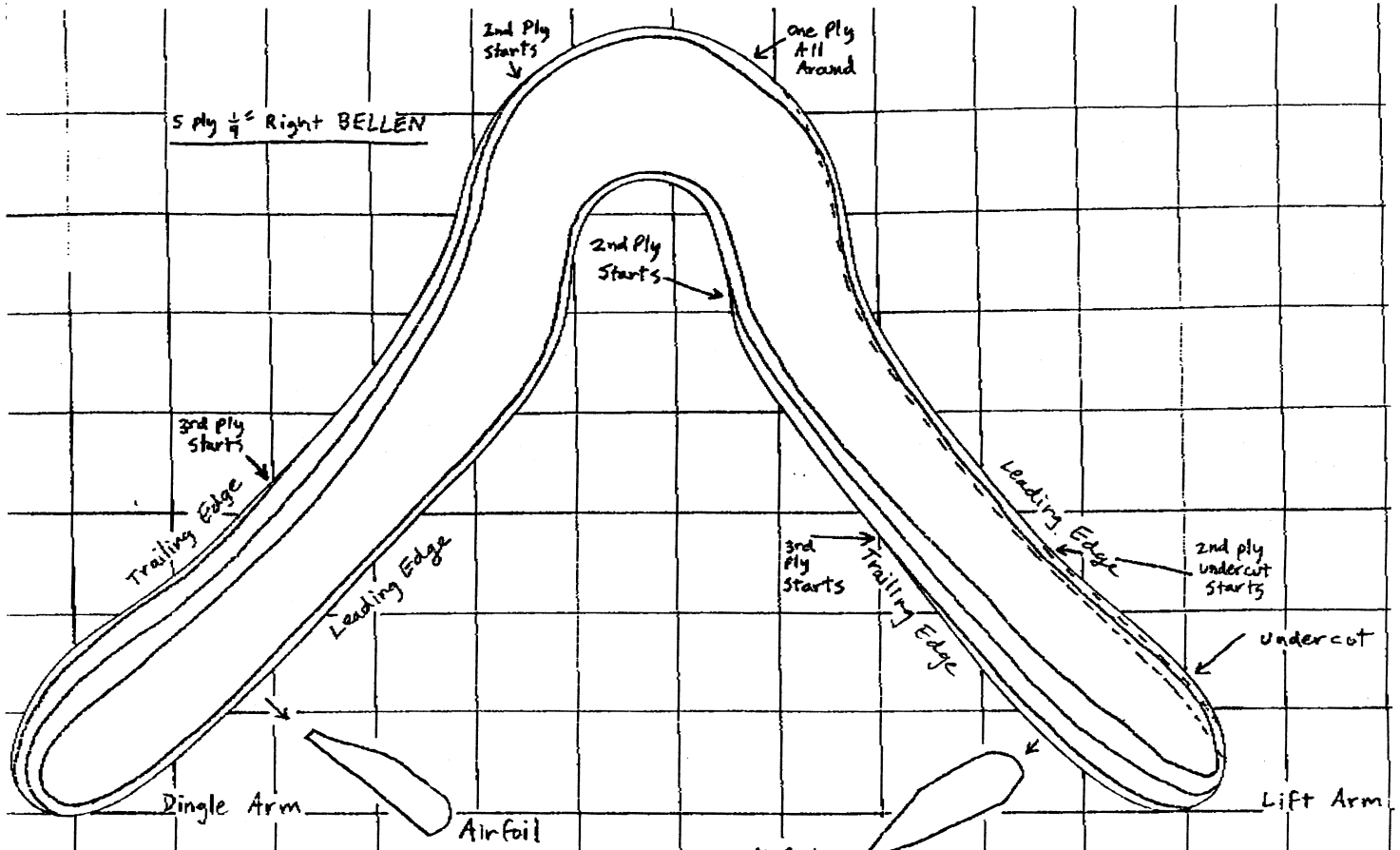
In addition, you will need a clamp of some sort to secure the boomerang-cut-out to a flat surface such as a table or bench. Be sure to clamp the boomerang to the edge of the flat surface so you do not gouge the flat surface with the sanding equipment. When the boomerang is clamped down you can then sand away at the edges of your boomerang blank. In the diagram, the lines represent the number of plywood lamination lines that should be showing after you sand the airfoils. Note: the outline is not a plywood lamination line. The dashed lines represent the laminated lines that should be showing on the underside of the lift arm, leading edge. Such a cut is called "undercut." The distance between each lamination line should be approximately equal to the distance between each lamination line in the diagram. When you are finished with a section of the boomerang, un-clamp the boomerang and move onto the next section. When you have completed all the airfoils, you are ready to do the fine sanding.

5) Fine sand your boomerang. Hand sanding with 120 grit, then 180 and 220 will produce a smooth surface. All you need to do is hold the boomerang and hand sand until the desired smoothness is achieved.

6) Test your boomerang. If it does not fly correctly, make the needed adjustments. Adjustments can be made with sand paper or a file. If your Bellen flies too low, sand more undercut (more lines showing) into the lift arm. If your Bellen flies too high, or has a "S" flight pattern, sand undercut into underside of the leading edge of the dingle arm. If you want to make the boomerang more accurate, sand undercut into the dingle arm. Take care not to sand too much undercut into the dingle arm, because it may crash into the ground without a full return. If the Bellen loses spin, sand more off the leading edge. In general, sanding to correct the flight pattern should be done little by little--because you can't put back, what you sand off.

7) Seal your boomerang. Any type of coating that will seal the boomerang will do: stain, poly urethane, or paint such as acrylic, enamel or lacquer. Brushes or spay equipment will get the job done. The idea is to prevent moisture from warping the boomerang. The sport of boomeranging is wonderful because there has always been an exchange of information and boomerang designs throughout the world. The unwritten moral and ethical law of boomeranging has always been: show everyone how to make the hot boomerangs, so they can make them for themselves and friends, but not to sell.

So, that is how to make a Bellen. But why stop there? Now that you have made a boomerang, experiment and try to make other boomerangs. Design your own. Have fun and have many happy returns.



BITS & PIECES

News from the USA

Chicago Bob has started publishing a new newsletter geared for the competitive thrower. The Competition Update will be published every four weeks or so during the competition season, April through October, and any other months in which boomerang tournaments take place around the country. The goal of the newsletter is to keep throwers from coast to coast up-to-date with tournament results and records from across the country. Each issue will contain that month's tournament results, printed in detail as well as the current, up-to-the-minute National ratings and Tournament Calendar. Features might be road trip stories, tournament reviews, details of records or feats, features on what the top throwers are using to get their best scores and set records, and other humorous and entertaining articles. The cost of the newsletter is \$7.00 per year for US subscribers, \$15.00 for overseas throwers who wish to keep track of what is happening in the US. Chicago Bob has put together a fine sample issue, which is free for the asking. If you want to check out the sample issue, or subscribe, please write to:

CHICAGO BOB

P.O. BOX 242

WATERLOO, IL 62298-0242

or call:

(618) 282-6854

Mole man introduces the World

headaches of scoring a USBA event with a simple set-up and easy input of thrower's names and scores. CyberGel will instantly update and track each event reporting totals on a complete sheet styled after the official USBA tournament score sheet.

The program was tested with great success at Mole Man's CT Boomfest this past summer and is now in version 2.1 with the kinks worked out. CyberGel is offered FREE to any USBA member by N.K.A. Software Associates. To get your own copy on disk, send your request and \$3.50 for 1 disk and shipping. Specify either 3.5" or 5.25" floppy disk:

N.K.A. Software Associates

444 Burrill Ave

Stratford, CT 06497

If you have a modem call Hobo's Junkyard at (203) 924-7348, 24 hrs. a day to down-load the program via the phone lines. It's listed as CYBERV21.EXE, a self-extracting compressed file. The FIDO-NET address is 1:141/1270, send E-Mail to N.K.A. Software Associates care of John "Mole Man" Anthony or Eric Stubner here any time. On CompuServe send E-mail to Keith Gunby, ID:70620,2611.

More Bad Press for the Boomerang

Alert Boomerang enthusiast **Michael "Gel" Girvin** sent in a copy of an article in which **Alan Adler**, inventor of the Aerobie Orbiter, misrepresents wooden Boomerangs. The article was printed in the Computer and Technology section of the Sunday June 13, 1993, edition of the San

boomerangs are not necessarily "easier to throw than ones." Adler then goes on to claim that "to catch a wooden boomerang requires you to throw it with the strength of a pitch in hard ball." The fact is that wooden boomerangs almost *never* "requires you to throw with the strength of a hard ball." This sort of intentional misrepresentation of wooden boomerangs is harmful to the sport of boomeranging. There are many wooden boomerang manufactures that produce top of the line easy-to-throw boomerangs. It is a shame Adler felt he needed to misrepresent wooden boomerangs in order to sell his product.

NOTE: The editor tried to get an explanation from Mr. Adler at Superflight, Inc., but was told there was no interest in discussing the matter. Superflight, Inc. is located in Palo Alto, CA. (415) 321-5050.

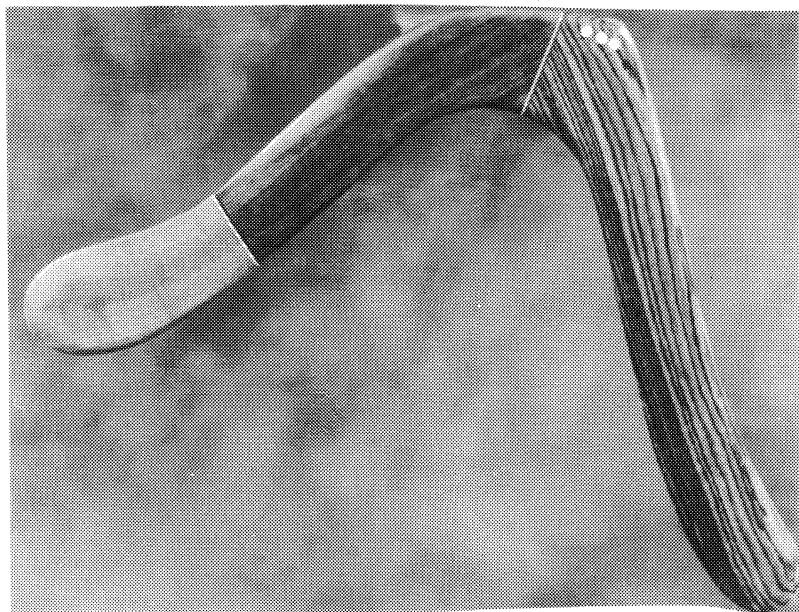
Gary Broadbent was recently married to the lovely **Vera** of Canton, OH in a small ceremony attended by **Mike Dickson, Steve Teodecki** and **The Snouffer Boys**. Gary shares that he has never been happier in his life, and has moved the entire Broadbent boomerang clan to the Canton area. Gary asks that no wedding presents be sent, but if you feel the urge to add to one of the largest boom collections on the face of the earth, donations will gladly be accepted. Word has it that the little women will be doing some serious butt-kicking on the competition field in the 1994 season. Gary and family can be reached at:

**Gary and Vera Broadbent
Broadbent Boomerangs**

3204 38th St. NW

es of 20 students plus teachers & parents about boomerangs. This was done as part of Donegal Middle schools Unified Arts Day in Marietta, PA. I each class students were given a boomerang blank made of 3/16" recycled Luan Plywood to shape their own boomerang. Because of the limitations the students could not shape their own boomerang in class but were shown how by demonstration and sent home with instructions on how to shape and throw the boomerang. An application for the USBA was included. I also set up a display of my boomerang collection and spoke about the history of B's and the USBA and it's competition events. The class ended with a 5 min. video of the tri-fly championships held in Allentown, July, 1993. Judging from the letters from students the school forwarded to me, they really liked the class and I have been invited back again for the next year. The students thought that the boomerangs were the ultimate in recycling. Taking recycled wood and making it into something that can be used over and over again...you just can't throw it away. For more info on how David set up this special program, call:

DAVID HENDRICKS
(610) 434-7305



Boomerang Raffle Information

Okay, so what's the deal here? What are you trying to sell me now? Why is this picture of a Malmberg boom staring me in the face?

Here's the deal: after getting the okay from the powers that be, I constructed a special boomerang that should be of some interest to collectors out there. It is going to be raffled off, with tickets available starting now, and will be awarded to the winner at the Nationals in Jackson, MI. (If you are not there, it will be sent to you.) Since the only way for you to see this is in black and white, I will attempt to describe it to you. It is constructed of three separate pieces of wood, in a shape that I modestly refer to as the Malmberg hook (somewhat loosely based upon several other shapes.) The lift arm is a single piece of kingwood. This wood is supposed to be violet in color, or violet-brown. It is closer to brown, with mild violet over-tones. This is the first completed boom I've ever used this wood in, and am very happy with it. The next wood attached to it is something of a mystery; I'm not 100% sure what it is. I bought it from someone who didn't know, either; both

of us suspect it is rosewood, possibly a Honduras rosewood. It is dark and light brown background, with black (dark green?) stripes through it. There are visible cross stripes (curl variations) throughout the piece. The wood at the tip is pink ivory, with very pronounced stripes (strong curl variant) on it (where on earth did Fred get *figured* pink ivory?) Finally, near the elbow, on the top surface, are three small circular inserts of mother-of-pearl.

The finish on the piece is exactly the same as I used on the 4 booms I took to the World Championships in Canada (for craftsmanship.) It has 19 individual hand sanding steps (after the machine work is done,) and has only an oil finish. That is, an oil finish sanded to 12,000 grit (not a misprint.) This boom **shines!!** The MOP inserts are so reflective, you can read the wattage on a light bulb peering carefully into them, (or go blind, trying.) The fit of the joints on this boom is extremely good, almost perfect, at places. Weight is 3.75 ounces; height is 8.25 in.; wingspan is 13.65 in.

This is an experiment. Since it seems to work for John Cryderman, I thought I would try it for the USBA. If this experiment does not generate enough income for the USBA, it won't be repeated. I insisted the ticket price be kept low (\$2.00 each, or 3 for \$5.00.) To get your tickets, send your money to:

USBA
PO BOX 182
DELAWARE, OH 43015

The videotape of Australian Boomerang Clips, as produced by Brother Brian Thomas, is still available for group USBA mail order. If you wish to obtain a copy of the 130 minute tape in VHS format, send a check for \$40 (USD) to Ted Bailey before May 15. A single check, converted to Australian currency, will be pro-

curred and mailed to **Brother Brian M. Thomas** on that date. The tape will be mailed directly to you after Brian has had a chance to convert the tapes to the American VHS system format. This is your last chance to procure this historic tape at any cost. Send your payment directly to:

Ted Bailey
P. O. Box 6076
Ann Arbor, MI 48106

John Flynn got some interesting press coverage in the form of a box score (see below) type of results printed in the paper covering his tournament July 17, 1993. Tournament directors should try this format and see if we can't some more exposure to the local public.

Boomerang

MERIDEN — Results, July 17 of boomerang tournament at Kimball Union Academy:

Individual

Fast Catch (5 catches in shortest time) — 1. Eric Darnell, South Strafford, 23.29; 2. Scott Barrett, Coopersburg, Pa., 23.52; 3. Larry Ruhf, Belchertown, Mass., 26.67

Maximum Time Aloft — 1. John Flynn, Hartford, 30.27 seconds; 2. Bob Forest, W. Springfield, Mass., 29.01; 3. Jim Jordan, Galtersburg, Md., 26.88

Accuracy — 1. Stephane Marguerite, Montreal, 38 of 50; 2. (tie) Ken Farr of Toronto, Adam Ruhf of Belchertown, Mass., Barnaby Ruhe of New York, 36 of 50

Australian Round — 1. Barnaby Ruhe, New York, 56 of 100; 2. (tie) Eric Darnell of S. Strafford and Keith Robson of Landsburg, Pa., 50

Doubling — 1. Dennis Joyce, Newport News, Va., 9 of 12; 2. Jim Jordan, 8; 3. Four tied at 6

Overall — 1. Dennis Joyce, Newport News, Va., 38.33 points; 2. Stephane Marguerite, Montreal, 38.04 points; 3. Barnaby Ruhe, New York, 30.82

Team Results

1. Lynnie Hanisch, Ola Wahlberg and Eric Darnell, 53 points; 2. Mark Zaitlin, Dave Barrett, Paul Sprague, 52.5; 3. Becky Nold, Keith Robson, Mole Man, 51

A bulk mailing of a combined advertisement for USBA membership, Boomerang News subscription, and a promotional for **John Cryderman** boomerangs was distributed to more than 1,000 boomerangs around the world who had let their USBA member-

ship lapse. If you didn't receive this mailing, don't get your feelings hurt. You were one of the devoted members who faithfully renewed your membership on time. Another mailing (to USBA members) of the Cryderman brochure that tells you how he makes strip laminated boomerangs is planned for sometime this Spring.

Jim Miller, of Sandy, Utah has just started the Wasatch Boomerang Club (named after the Wasatch Mountains in the area.) Jim reports that they only have a few members but hope to expand this spring with the help of a local TV station that has promised to do a feature story. Contact Jim at:

JIM MILLER
 1393 E Galaxie Dr.
 Sandy, UT 84093

Seth A. Berman, a Mechanical Stress Analyst with Raytheon Missile Systems Division, learned about the USBA through an article published in Mechanical Engineering Magazine. If anyone has access to this article please send it along to the editor.

Thomas Risher, owner of the Greyford, Co. in Whittier, CA. Is marketing a new throwing device called the X-ZYLO. It's main feature is that it can be thrown for distance. So far it has been thrown over 600 feet, making it the farthest throwing device on the market. It's so new that it's difficult to find in retail outlets. What the X-ZYLO can or can't do is still up for grabs. Anyone who buys one will be pioneering with this new throw toy. The Greyford Co. will offer the X-ZYLO for \$6.95 and \$3.00 shipping and handling. Orders to:

THE GREYFORD CO.
 PO BOX 4734
 WHITTIER, CA 90607

NEWS FROM AUSTRALIA

Bruce Carter, President of the Boomerang Association of Australia, says a couple of years ago, **Brian Kemp**, in an attempt to inject some humor into the BAA Bulletin, wrote that Boomerangs should be called BOOMERINGS. With the article concluding that the name Boomerang has a nice ring to it. **Jacques Thomas** was aghast that he was suggesting the name boomerangs be dropped. He wrote to the editor of the Bulletin - To **Brother Brian Thomas** himself and to other people. Brian wrote back and explained that it was a poor attempt at humor, but Jacques was not so sure and wrote to me. I immediately wrote back to Jacques explaining everything, and heard no more, finally believing this monster had been laid to rest. That was until the last issue of MHR arrived and I saw that the name Boomerang is again mentioned by Jacques. All I can say now is that it was all a joke and that Brian was not seriously considering a name change...but seeing as it has caused one hell of a disturbance and bells are RINGING in my ear. Maybe Boomerang has some possibilities? No Jacques, again we are happy with term Boomerang!!

NEWS FROM SWITZERLAND

The Swiss National Boomerang Championships took place in St. Gallen at the end of October because the army (owner of the property) had no other date open. It was cold but fair conditions for everyone. **Pascal Oggenfuss**, 12, won the special childrens Touna-

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ment. For the "real" Championships, throwers resigned Doubling and MTA so the Novice throwers could participate with the "Professionals". New Swiss National Champion is **Jurg Schedler**, winner of several international tournaments last year in Germany and France. He also took first place in the international rankings beating Germans Axel Heckner, and Michael Siems. **Th. Stehrenberger** and **David Hess** were second and third respectively. In Abandonee (France) Jurg had a marvelous score of 49 in accuracy, in St. Gallen he set a new national record in FC at 18.72. Thomas Stehrenberger set a new national record in Endurance with 58.

NEWS FROM ITALY

The Italians will be hosting the National Team Boomerang Tournament May 28 & 29 in Roma. For Info contact:

MAURIZIO SABA
VIA DEL TRULLO 122
00148 ROMA, ITALY
TEL 06/6538053

The 5th Annual Italian Tournament is scheduled to be held June 25 & 26 in Verona. For More information, contact:

MARIO CRESCEMBENI
C.P. 86
37100 Verona, Italy

The Costruire e Lanciare Un Boomerang (C.L.U.B.) is based in Rome and has 14 members at this time. They organize a Tournament every year and have been quite active in teaching younger throwers about Boomerangs. They are actively coordinating with other Italian Boomerang Clubs, such as with **Mario Crescembeni** who is head of the *Federazione Italia Boomerang Club*; and **Max Belvederi** of Bolgna, who is the current Italian Cham-

panion thrower and graduate of the *Team Gel* school of competition throwing. The club publishes a quarterly newsletter which carries the same name as the club. The newsletter is a good mix of competition, technology and humor. For more information contact Mario at the address on the previous column.

NEWS FROM BULGARIA

Georgi Dimantchev reports brother and Bulgarian National Team member **Marian Dimantchev** lives and studies in Middelfart, Denmark. He is doing his best to organize a Boomerang club in this town. He helps with boomerangs and information about boom history and sport for some articles to be published in magazines and newsletters in Denmark. Gearing especially for the Danes market, the brothers are distributing a new boom package; the "Good Boy" outdoor boomerang, made of lightweight synthetic foam plastic and the "Nice Baby" indoor Boomerang made of cardboard - "two toys that fly and come back" in one bag. They plan to organize in Middelfart a summer Boomerang School (10 days of instruction to throwers) and an exhibition in July this year.

The Bulgarian Boomerang Club has no Sponsor support yet, but, hope to assemble a 3 man team to compete in the World Championships in Japan.

NEWS FROM FRANCE

In the Tournament of Troyes held on November 6 & 7, several outstanding scores were reported. **Yannick Charles** won the event while posting a new European Record in Australian Round with 86 points. **R. Breton** won the

distance event with a marvelous return at 100 meters. **Gael Dubouays** was second with 99.10 m. There is a new address for correspondence or subscriptions to the France Boomerang Association Newsletter. Contact:

FABRICE PUCETTI
rue de l'eglise
10320 St. Jean de Bonneval
tel: 25 40 29 80

LATE NEWS

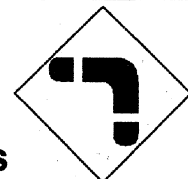
Kelly Andretti announces the dates are set for her tournament, The 9th Annual Gel Radtest. The tournament will be held in Olympia, Washington, at the Evergreen State College on May 28 & 29. The first Day will be USBA rated individual competition, the second day will be for team events. Contact Kelly at:

KELLY CROMIN-ANDRETTI
(206) 866-6519

The San Francisco Boomerang Club is offering a wide selection of Herb Smith boomerangs and other Australian Boomerangs and collectables. For a \$5.00 fee (refundable on first purchase) a set of photographs will be sent to prospective buyers. Contact:

Bill Tumath and Liz Toomey
127 Knollview Way
San Francisco, CA 94131
Tel: 415-550-6746

**Left
Turn**



Boomerangs

Recreational and competition models from \$8 to \$18. Made from 10 ply, 5 mm birch. Stained (not painted) to preserve natural wood grain. FREE CATALOG.

Norm Kern, 1640 Haynes
Birmingham, MI 48009

ENDURANCE/FC IDEAS

By Dr. Fred Malmberg

I would like to show you one of my latest concepts for Endurance/FC throwing, one that I feel can improve many novice throwers quickly, and may be of some assistance to advanced throwers. I noticed rather quickly that it is very difficult, especially during a timed competitive event, to think in terms of "left" and "right." Let's face it, these terms we designated to describe body parts or directions; they require left-brain logical thinking. Boom throwing "in the groove" requires right brain concepts, and this switching is not easily done. I wanted to come up with a concept that allowed me to correct for errors that inevitably occur, but that did not rely upon "Was that return to my left? Yes it was; now, to correct for that, I must now throw more to my left; which way is my left?"

The following is what I came up with. Since one is concentrating on what he believes to be the "ideal circle," or the perfect throw path that comes exactly back to himself, why not describe the corrections relative to this "ideal circle?" The corrections are based upon "inside" and "outside" directions, relative to your last throw. First, most of us use something, anything at all to aim at, whether it's John Kohler's left shoulder, chet's nose, whatever (see drawing #1.) It allows for a sense of consistency (hoping, of course, that the wind remains constant.) If the return is errant, or even less than perfect, corrections need to be made instantly.

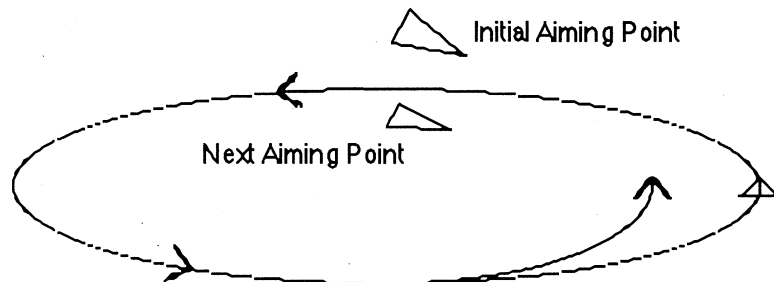
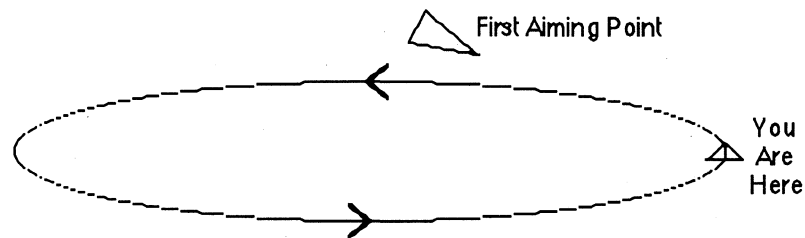
If the throw returns inside of the "ideal circle" path you envisioned (drawing #2,) that means the first part of your throw was actually

too much "outside of where it should have been. You don't have to know that, but since you can see that it is returning "inside" of where it should be, your adjustment for that will be to throw the next one more "inside" of your last aiming point. I call this "inside; inside;" pretty tough to remember, hunh?

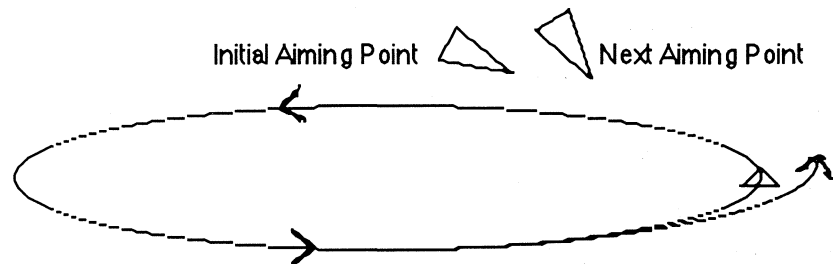
If the throw returns outside of the "ideal circle" path you envisioned (drawing #3,) that means the first part of your throw was actually too much "inside" of where it should have been. Again, you don't have to know this, but since you can see that it is returning "outside" of where it should be, your adjustment for that will be to throw the next one more "outside" of your last aiming point. I call this "outside; outside." The drawing below do

not show the entire path of the errant boom; an inside boom at the finish is outside at the start, also. I wanted to keep the drawings as simple as I possibly could, so that it would be useful for more people. The one other major cause of an "inside" return is the almost total lack of any wind; most FC booms tend to return "inside" when there is no wind. To correct for this, you must lay the boom over slightly more (slightly more horizontally, with the key word in that section being the word "slightly".)

My apologies for those expecting to find the keys to beating Rob or Chet in this article. Those keys are found on the field. However, I am certain this will be of use to some throwers, especially the novice and beginning boomerang throwers.



If the throw returns inside the "ideal circle," you now must aim inside of where you last aimed. This is what I refer to as "inside; inside."



If your boom returns outside of the "ideal circle," then your next aiming point should be outside your last aiming point. I call this "outside; outside."

How to Teach a Boomerang-Making Workshop

by Michael "Gel" Girvin

In all the years that I have been throwing, the greatest joy I have experienced with boomerangs happened the first day I threw out a boomerang that I had crafted, and it came back. I had spent an hour-and-a-half cutting and sanding my boomerang. When I was finished, I ran out of my workshop and down to the nearest 'clear area'. I stood in the middle of intersecting train tracks and threw my boom. It went out, then curved. And it came back. It came back to me. I didn't believe it, so I threw it again. It came back to me. It was an amazing feeling that I still remember vividly. I see the same thrill in other people's faces when I teach them how to make and throw boomerangs. When new throwers throw out a stick that they have crafted, and it comes back, they love it. That love is the reason we are all involved with boomerangs. Boomerangs are magic. If throwers can make the magic, they are hooked. If you have been making boomerangs for awhile and know how to diagnose and correct flight problems, consider organizing a boomerang-making workshop yourself. In preparation, try to locate a copy of Ben Ruhe and Eric Darnell's *Boomerangs: How to Throw, Catch, and Make It*. You will find diagrams and instructions for making boomerangs in this book. The book is out of print, but can be found in libraries. Even if your local library does not have it, you should be able to get it through interlibrary loan. Also, in this issue of MHR, you will find an article about boomerang-making. Future issues of MHR will run more articles on

making boomerangs.

Besides a knowledge of boomerang-making, you will need a location for your workshop, a publicity plan, materials and tools. Rather than holding your workshop in a garage or woodworking shop, consider holding it in an open field. It is easy enough to take tables and tools to a throwing field, and the open space enables you to immediately test and tune the new booms. Make sure the field you choose has plenty of open space so that unfinished booms do not cause problems while they are being tuned. Usually it is easy and inexpensive to reserve a field through your city's Parks and Recreation Department.

The Parks and Recreation people may also be able to help you publicize your workshop. Other publicity avenues include local newspapers, schools, bulletin boards and, most importantly, word of mouth.

For wood, I recommend that you use 1/4 inch (or thinner) birch aircraft plywood with five or more plies. Buy enough wood so that each person has two to three boomerang blanks. A 4' x 4' sheet will yield about 40 boomerangs. To find a supplier, contact your local hardwood dealers or consult the USBA Wood Source List. Many suppliers will ship wood to you. Emphasize to your supplier that flatness is important to you. If you use a flat piece and a proven boomerang design, you shouldn't encounter many flight problems. Cut out the boomerang blanks in advance for your students. Then the only tools you need are work tables, files (or rasps), clamps, and sandpaper. Power tools are not particularly feasible when teaching a number of people. They are expensive, the potential for injury is considerable, and it is difficult to arrange on-field power. When you select a work table, be aware that people may gouge it

with files or sandpaper. If you plan to use picnic tables, cover the surface with a sheet of plywood. Standard C-clamps work well for clamping boomerangs to work tables. You will need both flat and curved, coarse and fine files (or rasps). A 4-in-1 file with all of these features is ideal. 80 and 150 grit sandpaper will smooth the boomerangs out. Each person will need his or her own C-clamp, files, and one sheet of each grit sandpaper.

Prior to the workshop, make up a few boomerangs so the students have models to work from. Leave the booms unfinished so the students can see the glue lines in the plywood. To start the workshop, show the students how the boomerang is made, step by step, with the tools provided. Then throughout the workshop, help people with how to use the tools, where to put the airfoils, and how to correct flight problems.

Be sure to work out your costs before you publicize your workshop so that you will know what to charge participants. The cost to run a workshop for ten people, including tools and materials, is approximately \$100—\$150. Charging \$10—\$15 per person is a bargain for your students. You will then have the tools paid for, and you can run future workshops. The files are the biggest expense. Look around for bargains. Maybe a friend has a pile of files in their basement. The Parks and Recreation Department may be willing to contribute some funds, or they may be able to provide tables or tools for on-field use.

It is difficult to give advice about tuning boomerangs because each shape has its own characteristics, but here are some general tips.

Problem: Boomerang is thrown well, but loses spin and falls short.

Reason: Too much drag caused by dull edges.

Solution: Round and smooth the leading and trailing edges of the top side.

Problem: Boomerang climbs too high and does not fully return, or has an S-flight.

Reason: There is too much lift built into the lift arm. This may be caused by too much undercut or bend in the lift arm.

Solution: Carve undercut into the leading edge of the flat side of the dingle arm (also known as the trailing arm). Or remove some of the undercut from the leading edge of the flat side of the lift arm. Do this by filing or sanding away some of the leading edge.

After undercut is removed, be sure to round off and re-sand the leading edge of the top side.

Problem: Boomerang curves without climbing and crashes into the ground.

Reason: There is too much lift built into the dingle arm. This may be caused by too much undercut or bend in the dingle arm.

Solution: Carve undercut into the leading edge of the flat side of the lift arm. Or remove some of the undercut from the leading edge of the flat side of the dingle arm. Do this by filing or sanding away some of the leading edge.

After undercut is removed, be sure to round off and re-sand the leading edge of the top side.

When the woodworking on the boomerangs is completed, people may wish to stain, clearcoat or paint their creations. You may wish to have some finishing materials on hand, but it might be better to have people decorate their booms at home, where they can be set aside to properly dry. A light re-sanding (perhaps using 220 grit) will remove grass and dirt stains before finishing.

Over the years, I have found that there is no better way to spread the joy of boomeranging than to teach throwers how to make the magic stick that, when thrown, comes back to you.

MAKING PHENOLIC BOOMERANGS

By Michael "Gel" Girvin

Birch plywood is a common source material for crafting boomerangs. A less common material is phenolic. The boomerangs yielded from phenolic are fantastic flyers, the only drawback is that it is dangerous to work with.

Phenolic is a resin composite that is available in sheets of varying sizes and comes in three grades; paper, linen, and canvas phenolic. I have crafted boomerangs with paper and linen phenolic. Currently, I use only linen because it is a great deal stronger than paper phenolic and it holds hand bent tunes well. You can purchase sheets in varying sizes and thicknesses. 3/32" (0.094" or 2mm) phenolic works well for MTAs and 1/8" (0.125" or 3mm) works well for other boomerangs.

Phenolic can be purchased at plastic stores. You can find a full list of plastic stores under "plastic" in your phone book. If your local stores do not stock phenolic, or, there are no plastic stores in your area, you can go to the library and locate plastic sources from the phone books in large cities. The most reliable source I have found is INTERSTATE PLASTICS, in San Leandro, CA. They will sell 2' x 4' sheets and larger at reasonable prices and will ship UPS. You can contact them at 800-466-4341.

Ask for Ilona.

The advantage with phenolic is that you can construct boomerangs that are thin and dense. The thinness helps the boomerangs handle wind. The density causes the boomerangs to travel a great distance. You can make MTA's that will travel higher than most wood MTA's, but they tend to descend faster than wood MTA's because of the density. You can also make distance boomerangs that are very accurate.

Caution must be taken when making phenolic boomerangs. You do not want to breathe, under and circumstances, the phenolic dust. I do not know what the physical/medical repercussions of breathing the dust are, but as my warehouse neighbor, Dave Grover, told me once, "it is like having acid and sandpaper in your lungs." There are ways to protect yourself. A respirator with a rubber face seal will prevent the airborne dust from being inhaled. I use a 3M respirator; part #7200 Dual Cartridge Half-Mask Respirator Facepiece with #7286 cartridge holder, #7255 High Efficiency Filter, #7288 Retainer for High Efficiency Cartridge Filter. You can locate such 3M items at most paint stores, or look in the phone book under "safety equipment" for 3M retailers. You can also phone 3M direct at 800-243-4630. You will also need an appropriate dust collecting system that collects the dust as you produce it, such as you would find in most professional woodworking shops. Other methods of collecting and disposing of the dust can be used but are not safe.

As far as tools are concerned, I have only constructed phenolic boomerangs with power tools. Hand tools such as coping saws, files, and sandpaper could be used, and in fact would be safer because the amount of dust generated would be considerably less. Although, I would suggest that the first step (cutting the boomerang out) be done with a power tool such as a jigsaw because the phenolic is quite hard and would be difficult to cut with a hand saw.

Making phenolic boomerangs is an involved task, but the rewards can be great. Varying spectacular flights can be obtained with phenolic boomerangs and many of the competition boomerangs used today are made from phenolic. If you want thin, dense boomerangs that can attain great distances and return accurately, or boomerangs that hold hand-bent tunes well, phenolic is a great material to use.

What Makes this So Special?

By Norm Kern

It's Seattle. I warm up for Fast Catch with a new boom. The spotters say I'm a little short of 20 meters. John Kohler tells me to twist a little negative into one arm. I get 20+ meters, 5 straight catches, and set a new personal best. All the other competitors share my jubilation; even those I have just beaten.

It's Seattle. The US Open is over. The winds were up but I got a 34 in Endurance. Barneby Ruhe did not make the top 12 for the first time in who knows how long but has the time to congratulate me on a good round. He got 33.

It's Birmingham, Michigan. There are kids with white shirts and kids with red shirts; there is a soccer ball. There are parents on both sides of the field. When the white shirts do well, most "red parents" are silent. Some yell criticisms at the red shirts. They don't even acknowledge the good play of the white shirts.

It's Delaware, Ohio. Endurance and the winds are down. My hottest Fast Catch is controllable in warm ups. I'm looking forward to another personal best. Sean Marquardt is taking his turn. He has 10 in the first minute. He's on the pace I hope to achieve. I'm spotting range, his boom starts out at 22 meters, then 21, then 20.5, then 20.5 again. I warn him close to being short. His next 3 or 4 throws are undeniably short. I call them short. Even though I want to beat him, I feel sadness at the need to call the throws short. When his round is over, he thanks everyone for helping out, even the spotters.

It's Delaware, Ohio. Just over the fence is the softball tournament. Looks like fun but only half the cheer for the good plays. Every encouraged remark is also intended to discourage someone else.

I'm getting uncomfortable around the soccer and softball fields. What is it about boomerangs that lets your competitors be your biggest fans, your best coaches, and your most forgiving officials? The sportsmanship and the camaraderie we have in the USBA is very, very special. Don't take it for granted. Treasure it. Nurture it. And let's not let anything spoil it.

BOOMING THE VORTEX

by Gregg Snouffer

It was October and while the rest of the country was settling comfortably into Fall, the Arizona sun was still scorching the desert southwest with brilliant, warm days while allowing crisp, cool nights. The Sedona landscape at times like this becomes surreal, like something out of a painting. The mesas and plateaus rise magnificently, like cathedral spires above the barren, rocky plains, while canyons cut by swiftly flowing streams dig deep into the rugged terrain and distant mountains beckon you to leave the twentieth century far behind. The sudden appearance of an Apache warrior on a rocky overhang should come as no surprise.

Chicago Bob, Mark (Wildman) Weary, and myself had been booming in Phoenix, two hours to the south, the weekend spent at Mark's first tournament. But Phoenix's urban sprawl held little more interest to me than my own Columbus, Ohio. Sure, it had its uniquely southwest architecture of earthy stucco houses and its remarkably flat landscape dotted by mounds of rocky outcrops, like massive chocolate chips plunked down on the desert by some great helicopter. But apart from this, Phoenix held the same fast food, strip malls, rush hour traffic and urban mentality of

any large American city. No, we had come for this, the desert, the mountains, the vortices, UFO's and supernatural phenomena that characterize Sedona, Arizona; one of the great new age power centers of the earth. So, after the tournament and weekend-long party at Wildman and Tina's "Casa de Weary," We ran the last of the revelers to the airport chiding them for returning to their Mundane lives SO prematurely, cleaned up the battered Casa, sanitized the backyard pool, packed up our hiking and camping supplies and headed north, toward the land of possibility.

Sedona, like Mount Shasta (Leading Edge issue 52, Oct. '91) has long been recognized as a natural power source. And it has always been a priority of ours to seek out such power points and boom them. In the Sedona area, the red rock sandstone is rich in iron, which, they say, amplifies the natural vibrations and electro-magnetic energy of mother earth. It is said that the human body in this environment, while resonating at its normal frequency, has a significantly increased amplitude, resulting in a greater feeling of contentment and centeredness. This phenomenon has drawn and held settlers to the area since the first people set foot on the North American continent, and possibly before even that. You see, there is strong evidence to indicate that the area may be, in fact, an intergalactic power point . . . for three mid-



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western boomerang idiots, it was to die for.

It was only our first night out, as we pitched our tent under a starry canopy too intricate to describe, when we observed our first UFO's. The encounter began with the roar of Air Force jets. We hurried to a place where we could observe the two aircraft, flying low, in formation. Then we saw the strange lights out in front... two separate, single lights, glowing solidly, in contrast to the multiple, flashing beacons of the planes... darting ahead, leading the military craft on a supersonic chase across the skies. As they disappeared from view on the horizon, a third light zipped across the sky diagonally, high over head. It seemed as if they were playing a game with the Jets, like squirrels taunting a frenzied dog at the end of his rope, while another sneaks in behind to steal his food.

A late night trip to Arby's confirmed our suspicion, as an old man at the next table spun a tale for two younger sojourners about alien burglaries of energy-rich gold ore from nearby veins. The aliens, it seems were able to telepathically swipe the stuff right out of the unsuspecting prospector's pan as he dipped it from the stream. We eyes dropped intently as he continued long into the night with stories of alien power grids in the nearby desert, serving as a beacon to spaceships from far off galaxies, and capable of erasing the mind of a human being who might stumble upon the place.

Booming the vortexes was another thing. These swirling rivers of electro magnetic energy exist in three forms. The "upflows" stream up from high places, like mountain tops into the heavens and convey energy that causes the human spirit to soar. When

flowing down from the heavens into earth, they are called "downflows" and are places of quiet reflection, such as near the banks of a stream in the bottom of a canyon. The third are horizontal vortexes which are located at overlooks and tend to lend insight into past and future lives. It is an interesting concept that may explain what, exactly, it is that draws us towards these places. If you are familiar with the exalted feeling you have when standing atop a mountain, with the earth at your feet, or the quiet serenity when sitting by a stream, then you have experienced the draw of a vortex and the subtle effect that its energy has on your spirit.

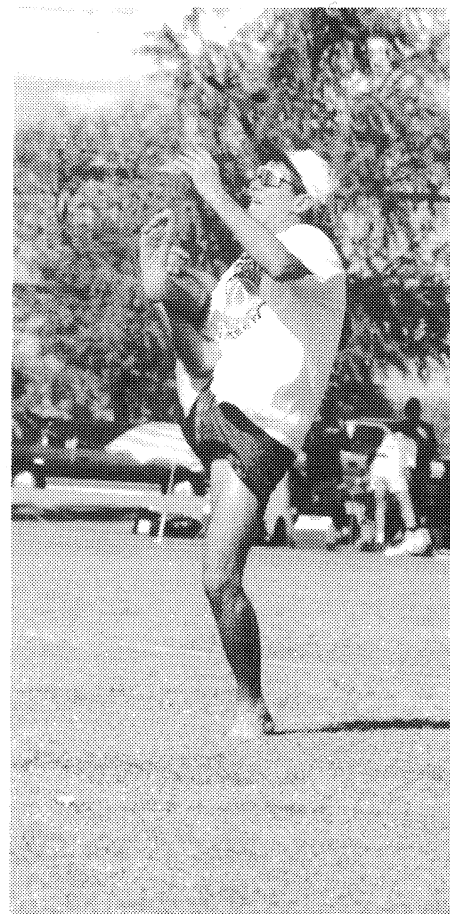
We aggressively set to work; our goal, to boom all three types of vortexes. We hiked and climbed, crossed rivers and ravines. Our range spiraled out and around over dizzying heights, tossed bravely over vistas from which there was no hope of rescue had our noble booms refused to process. We played GLORP on three of Sedona's four known vortexes. Our rangs were loyal and we lost not one.

Finally, as we lay on our backs surveying the night sky after an arduous day of booming, we searched the heavens for the answers to such imponderable questions as, "In GLORP, if you use your Dan Quail 'E' and, in using it, end up winning the game, do you get to use it again at a future time, or is it gone forever?" We looked up at the myriad stars and wondered if there was someone out there in all of that expanse who could beat Chet, and if a perfect 100 would ever be scored in Australian Round during competition. Would Gary and Vera get married? Would Bud ever win a nationals? Would Bob ever make a U.S. team? Would trick catch and doubling

ever be combined? What ever happened to the plane? Is Barnaby a reincarnated Shaman? We got stupid.

As time passed, so did our vacation, and soon it was time to head home to write up this story. We thanked the Weary'meister and were on our way,. another tournament season in hand and the catastrophic road trip to Virginia Beach now far from our minds.

It had been a magic week, one that reaffirmed our belief in the power of a prehistoric tool of unknown origin. Everyone knows of its ability to mysteriously fly out and return to its thrower. But we were aware also of its magical ability to bring strangers together and turn them into friends, to unite those friends from across the country and around the world, and to transplant three of them, for one short week, to a mystical place called Sedona.



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Circulation: 400 Worldwide.
Published by the:

U. S. Boomerang Association
P.O. Box 182
Delaware, OH 43015

Mechanical Measurements:
Image area: 9.5" deep by 7.5"
wide; 3 columns to a page;
width of a single column: 2.25"

Advertising Rates:

| | |
|-----------------|-------|
| Full Page | \$200 |
| 2 Columns | \$150 |
| 1/2 Page | \$115 |
| 1 Column | \$80 |
| Per Column inch | \$10 |

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USBA INFORMATION

The USBA provides information listings to members at a nominal charge. A listing of boomerang manufacturers; a listing of wood sources; and a listing of boomerang clubs can be obtained by sending a SASE. Allow one ounce postage per listing. A sampling of vendor catalogs or a USBA rule book costs \$2 and a self addressed envelope (no stamps). Send all inquiries to:

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Chet Snouffer will respond quickly to special inquiries that are mailed to: Chet Snouffer; 51 Troy Rd.; Delaware, Oh 43015. In the event of an emergency, you can contact Chet at (614)-363-8332 (9 -12 AM EST).

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