

No. 26

A Quarterly Newsletter of the U.S. Boomerang Association

Spring 1986

# Atlanta Hosts Nationals June 6-8

Mark the weekend of June 6-8 down on your calendar for boomerang-throwing and plan to be in Atlanta for the sixth annual United States Boomerang Association Nationals. It promises to be the best tournament yet--plush, enormous Atlanta football Falcons training fields, excellent. nearby accommodations, reasonable and the first-time Nationals use of the exciting new player ratings system. All this, plus the promise of traditional Southern hospitality by the host Atlanta Boomerang Society.

Plans for the event were announced in the last newsletter (Nos. 24-25) and a detailed schedule will be mailed all USBA members shortly. Meanwhile, Dr. Brent Russell, Atlanta president, and his tourney group wish to emphasize the following:

+ For those flying to Atlanta, the society has organized a discount rate with a travel agency, plus shuttle transportation from the airport to the Falcon's camp in Suwanee, 30 minutes northeast of Atlanta. Everyone coming by air should participate. Call Travel Inc. at toll free 1-800-334-6576 to arrange your booking. Be sure to mention the USBA, and specify particular travel needs.

+ Fine, quite inexpensive accommodations are available at Falcon Inn adjacent to the throwing area. The cost is \$40 per room per night with up to four people permitted per room, each with two double beds. Reservations must be received by the hotel by May 26. Write Falcon Conference Center, Suwanee Road at I-85, Suwanee, GA 30174 or telephone the hostelry at 404-945-6751. A reservation will be confirmed by the inn upon receipt of a check or credit card number. + A group dinner will be held Saturday night at Falcon Inn at a cost of \$10 per person, children under 5-free. Since the hotel must know how many people to plan for, USBA members need to send a check for the appropriate amount by May 26. Send it to Atlanta Boomerang Society member Phil West at 1529 Christmas Lane, Atlanta, GA 30329. Let him know any special dietary needs.

+ Again this year, an auction to benefit the USBA will be held opening night. Each USBA member is asked to donate one or more select items for sale----boomerangs, T-shirts, memorabilia, etc. The Atlanta group would appreciate having the donations in advance so it can get the fund-raiser well organized, although members can of course bring their gifts along with them to turn over on the spot. If mailing your donations, address them to *Continued on Page 3* 

# **Competition Rules**

The USBA Board has been very busy over the last couple months negotiating rules of play and scoring methods including a player rating system. They have endeavored to make rules as fair as possible to everyone.

The Board has just completed USBA RULES OVERNING COMPETITION - 1986. This document contains many rule changes that have been made in order to standardize tournaments and events for the implementation of the player rating system.

For a copy of this publication please send \$1.00 to cover printing and postage costs to Ray Rieser, P.O. Box 2146, Lower Burrell, PA 15068.

## What's Ahead

April 25-26, Friday and Saturday, lectures by Ben Ruhe and Eric Darnell at Houston Expo. Phone Virginia Hancock at 713-223-5454.

May 3, Saturday, boomerang jam at University of Maryland. Phone Dean Helfer at 304-296-1876.

May 3, Saturday, annual Atlanta Boomerang Society corroboree. Phone Phil West 404-634-6728 or Dr. Brent Russell 404-355-0061.

May 10, second annual <u>night</u> team throw on National Mall in Washington, D.C., starting at 9 p.m. Regional teams invited. Information from Ben Ruhe 202-234-9208 or Chuck Bernstein 202-965-4230.

May 10, Saturday, University of Illinois Boomerang Club conducts workshop for University of Minnesota-Duluth outdoors club at Duluth. Boomerang fans within driving distance of the campus are invited. Phone Jill Jacobson at 218-726-7169

May 17, Saturday, first annual Evergreen State College "boomtest" at Olympia WA, starting at 9 a.m. Phone Michael Girvin or Steve Fargon 415-428-1813.

May 31, Saturday, fourth annual workshop at Yale's Peabody Museum in New Haven. Lecture by Ben Ruhe to be followed by outdoor demonstration, teaching and competition. Janet Sweeting 203-436-1710.

May 31, Saturday, seventh annual workshop at Mingo Park in Delaware, OH. Chet Snouffer 614-363-8332.

June 6-8, Friday to Sunday, USBA Nationals in Atlanta. See story in this issue.

June 21, Saturday, second annual Jamestown Open on beach front campgrounds near historic Colonial Williamsburg, VA. Many prizes, catered outdoor supper, camping, swimming. Details from Dennis Joyce 804-595-8935 or Callie and Ray Laurent 804-872-7095.

June 20-22, Friday to Sunday, demonstrations

and teaching by John Flynn and Eric Darnell at Quechee Balloon Festival, Woodstock, VT. Darnell 802-765-4066.

June 28, Saturday, annual Buffalo, NY, Open (tentative). Phone Professor Duwayne Hatchette at 716-882-8858 or 881-0820.

June (No date yet set), annual regional championship at Berkeley, CA, sponsored by Team Gel and Samiches. Michael Girvin 415-428-1813.

Aug. 2, Saturday, sixth annual New England Championship at University of Massachusetts, Amherst. Individual and team events. Dr. Larry Ruhf 413-323-4340.

Aug. 23, Saturday, seventh annual Free Throwers' fling in Delaware, OH. Chet Snouffer 614-363-8332.

Aug. 24, Sunday, fourth annual Northeast Ohio Open at Cuyhoga Valley National Recreation Center, noon -6 p.m. Directed by National Rark Service. Dave Boehm 216-442-6024.

Sept. 21, Saturday, annual Summer's Final Fling at Portland OR, 10 a.m. At Five Oaks School in Beverton. Doug DuFresne 503-292-4316.

September (date not set), boomerang jam at Wildwood, N.J. Dean Helfer 304-296-1870 or 412-588-7858.

Autumn (date not set), annual Long Island Open. Holly English-Payne 516-627-1389.

The above is a partial listing and does not include numerous workshops, demonstrations and competitions conducted at fairs, shows, conventions etc., across the country. Dave Boehm and Dean Helfer (Phone numbers above) are particularly active in this field.



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Editorial contributions; We are always looking for editoral material in the form of articles, black and white photographs and art work. Be sure to keep a copy of your material. Anything you want returned should be accompanied by a self addressed stamped envelope. Submissions should be made to the Editor: Ben Ruhe, 1882 Columbia Road N. W., Washington, DC 20009. MANY HAPPY RETURNS is produced by an unpaid all-volunteer effort.

## Nationals

#### Continued from Page 1

ABS member Jim Hooker, 2755 Tallulah Dr., Atlanta, GA 30319. Gifts are tax-deductible. Ask for a statement from the USBA.

+ Finally, if you want to enter the traditional design competition Friday evening, get your entries organized now, or start carving. Members can enter their own boomerangs, or those of foreign makers, who are USBA members. Categories are best crafted, best decorated, best natural wood elbow, and most original.

Recapping the schedule:

**Friday**----Registration, talks by experts, design competition, auction.

**Saturday**----USBA annual meeting, practice throwing, competitions, group dinner, videos, night throw.

**Sunday**----Practice throwing, competitions, swimming, awards dinner hosted by Sharon and Dave Schumm, entertainment.

Monday----Departure.

Questions on the weekend including tourism to Atlanta for wives and children will be answered by Russell at 404-355-0061 (after 9 p.m.), Dave Phillpott at 404-998-0604, West at 404-634-6728 and Hooker at 404-237-7499.

So, plan to come to Atlanta, and start praticing your throwing and catching now. As Brent Russell comments: "The 185-by-185 yard, professionally maintained turf Falcons field is a boomerang connoisseur's dream." Don't miss it.

# X

# Swainsboro Tournament Results

Because the editor of this newsletter read the results incorrectly, the recent report on last year's throw-off at Swainsboro, Georgia was wildly incorrect. Here is the correct ranking: John Derden of Swainsboro first over-all, Dan Jones of Swainsboro second, Dave Philpott of Atlanta third, Neil Kalmanson of Swainsboro fourth, Jimmy Hooker of Atlanta fifth, and James Doster of Swainsboro sixth. Congradulations to all.



## Available to USBA Members

As a service to its members and a way to raise money for the organization's treasury, the USBA continues to offer selected objects and printed material for sale at reasonable cost.

New on the list is **Booomerang**, a paperback reprint of the 1977 Many Happy Returns (Viking) by Ben Ruhe. Close to 500 copies of this basic, easy-to-read illustrated 132-page publication were recently donated to the USBA by Bob Coakley of Washington D.C., who helped finance the re-The book covers history, physics, issue. construction, throwing, games, records, feats, killer-sticks; and much more. It was described as "a charming essay in practical anthropology" by the New York Times. To make the book widely available, the USBA has pegged the price at \$3.50 postpaid, three copies for \$10 ppd. If you haven't read this volume you should. If you have and you liked it, consider buying a batch to give as gifts, or present to your local public and school libraries to spread the word about boomeranging. You can take a tax write off on such a gift in the bargain.

Also available from the USBA (all items are postpaid):

+ H.L. Mayhew's charming *Big Book About Boomerangs*, \$5.50.

+ John Mauro's scholarly *Introduction to Boomerangs*, \$2.89.

+ USBA patches, \$3.50.

+ A nine-page collection of recent news articles on the sport, \$2.50.

+ An 18-page collection of technical articles on the boomerang from *New Scientist* and elsewhere, \$2.50.

+ A packet of information on organizing a boomerang tournament, \$7.00.

Payment is by check or money order. Address: USBA, Box 2146, Lower Burrell, PA 15068.

## News and Views From Europe

#### France

Dominique Pouillet of Gif-sur-Yvette writes touchingly: "In a few days I'll be leaving the snow in Paris for the wonderful sun of Ceylon. Of course, I won't forget my boomerangs. Can you imagine a night flight over a pagoda! I hope to have some very special photos. I write this letter from the hospital where I've been spending 13 days for a nasty disease called multiple sclerosis with which I've been living for eight years ( almost accustomed to!). This morning I made a mini-exhibition in the ward of the hospital for the nurses and doctors. My passion for boomerangs and a good morale are my best weapons against the disease. Any passion life! Vive Le Boomerang!".....French means boomerangers led by Jacques Thomas, an old friend, paid a New Year's call on Emile Merle d'Aubigne. 92, who in the 1920's, as manager of an industrial firm, used small boomerangs made of fiber as a promotional tool for his company. D'Aubigne some years ago gave the last one of them known to exist to Thomas for his historic collection of boomerangs. Thomas reports it still flies decently and returns nicely ..... In another ceremonial event, Thomas presented a numbered and inscribed Black Ace boomerang to Patrick Baudry, France's first astronaut. The scene was the annual "Fete du Ciel" in the Jura mountains, a celebration of balloons, kites, small airplanes, and boomerangs. Baudry in turn signed boomerangs of Thomas and colleagues.... The European distance record was jointly set by Christian Jabet of France and Dr. Philippe Haake of Switzerland at a late '85 tournament in Lyon. Both got their 'rangs' out more than 90 meters and had accurate returns. There were 11 officials. Jabet, of the La Perouse Boomerang Club, used a boomerang made of a material called Micral, supplied by the aircraft firm of Dassault, which uses it for jet fighters. The 'rang weighed 140 grams, was 3mm thick, had a 3.5 cm average width of blade, and had a 45 cm wingspan. Haake used a Paxolin Marathon by Herb Smith, weighing 77 grams....When the five Americans who made that tour of French resorts last summer got to Royan, they climbed a giant sand-dune nearby and threw boomerangs off the top. Jean-Claude Laquitton of Reims, reading about this, wrote to say that the author of the first book on boomerangs ever published in France, Andre Turck, ascended the

same natural wonder in 1939 and himself flung a boomerang from the ridge. "I think he would have been very pleased to see all you modern in action," boomerangers Laquitton.... Says Incidentally, those touring Yanks discovered numerous enthusiastic boomerang clubs scattered across France and have since heard from a number of them. The clubs would love to establish relationships with American clubs and in most or all cases have wonderful things to trade, like Following are the contact names and T-shirts. addresses of three groups: M. Rossignol, Association Boomerang Cognac; 16370 Cherves-Richemont.

J.C. Laguitton, Boomerang Club of Ardennes, 53 rue Pierre Taittinger, 51100 Reims; and Eric Attele, Ouest Boomerang Association, 8 rue des Bouleuse, 44600 Saint Nazaire.

#### England

After 31 years of service in the British penal system, Herb Smith, the great long distance thrower, will retire next November. "I will spend part of my leisure time making more boomerangs," he says, "The business will remain a one-man affair, as I have no intention of churning them out in the thousands. Each will be an individual carving, and will still be hand-rasped and sanded. For my latest boomerang models, I am using Paxolin, a resin fiber, in a 3.2mm thickness. It makes excellent boomerangs, now that I have become accustomed to the material. I doubt that I will be making many wooden models from now on."....John Jordan, prime mover in the British Boomerang Society, adds his comments on Paxolin: "The relative density is about 1.36 and a year ago I would have said this was far too high for boomerang making. How wrong can one be! The main point, I think, is that the material used is only 3.2mm (1/8 inch) thick and in the successful designs the arms of the boomerangs are quite narrow--say about 22mm. This means that the weight is kept quite low. You'll be surprised at the range and the way Paxolin 'rangs handle the wind. And I predict that when more competition throwers get hold of them, they will demand that extra distance circles of 60 and 70 meters radius be included in the Australian Round competition. The boomereands are that good."....The annual October tournament at Dulwich Park organized by Dr. Elisabeth Goodhew and John Wray drew its usual turnout of fine throwers and a surprise overall winner, Kaspar

Kramis, all the way from Geneva, Switzerland. Another visitor from the continent, Jacques Thomas, from Lyon, France, won the Accuracy throw---this against the likes of Dave Schummy, Herb Smith, Robert Leckie, Tony Slater, John Jordan and other whizzes.

#### Germany

Volker Behrens of Lubeck and Wilhelm Bretfeld of Hamburg are jointly planning to really promote boomeranging this year in north Germany ("the rain and fog area," Behrens calls it). They propose more demonstrations and competitions and a north German boomerang newsletter focusing on advanced designs and throwing techniques, some culled from boomerang publications around the world and others distilled from European experience. "What's missing here is advanced information from experienced people," says Behrens, who intends to make up for lost time in a rush. Look out. boomerang world! To share information, write Behrens at Kronsforder Hauptstr. 59, 2400 Lubeck, Germany.

#### Austria

"Discovered" last summer by Brother Brian Thomas during his European sojourn, Dr. Ernst Duda of Vienna emerges on the boomerang scene as one of the most dedicated of all throwers (he wore Brother Thomas out several days running) and a demon collector, with hundreds of sticks in his collection. "With my more than 300-piece arsenal to choose from (mail-ordered from three continents)," he writes, "I split the best of them into "windy" and "calm" fliers, and place them in two shoulder bags (along with gloves, mittens, towel,etc.; but no kites!). For stormy weather, I prefer Wilhelm Bretfeld's hooks, the weighted Stickaround hook, on the weighed Binghi Black Star. On calm days, there's bag No. 2 to take out, with Ted Bailey's Minis and MTAs, Binghi Eagles and Swans, and the Darnell Windcheater with its super flight. On holidays, I do birdwatching in the mornings and boomerang throwing through the afternoon. There are very nice steppes, or Alpine areas, nearby for both. To wind up the day, I throw every one of the 100 or so boomerangs in my kit and catch once before packing it away for the day---- fun against time and the setting sun." .....The Australians used to call MTA (maximum time aloft) the Slow Catch event. Well Dr. Duda in a postscript now claims the world's slowest catch. Thorwing on Christmas Eve, he landed a boomerang on thin ice and had to abandon it when a storm blew in. Returning to the spot New Year's Day, he found the ice thickened and located his boomerang intact, if a bit frozen. "This is a catch record for sure," he says. "But no witnesses!"

#### Switzer land

The Boomerang Club of Geneva will stage a demonstration during Fourth of July celebrations in that city expected to attract up to 70,000 people. Dr. Philippe Haake notes that the Swiss celebration of U.S. independence is the biggist such fete outside The Swiss are rapidly picking up in America. throwing expertise. Haake himself has now done a 90 meter distance toss with accurate return and Kaspar Kramis has scored 27 seconds in Fast Catch, a very respectable time. The Swiss plan their national boomerang throw Aug. 30-31 in Geneva and hope to make something of an international event by inviting players from Europe and elsewhere to compete. Details from Dr. Haake on request at Case postale 23, 1225 Geneve, Switzerland.



#### Speakers Available

For its continuing promotion of the recent book Boomerang: How to Make, Throw and Catch It. Workman Publishing of New York City is prepared to send co-authors Ben Ruhe and Eric Darnell to selected University Campuses and other trendsetting locations to spread the word about the sport of boomerang throwing. While these trips help sell the volume, they also aid boomeranging in a big way and thus can be considered of interest to USBA members. Members or others anywhere across the country interested in having a quest appearance. lecture, demonstration, teaching sessions ----by Ruhe or Darnell are invited to phone publicist Mary Coffey of Workman at the toll free number 1-800-722-7202 and discuss ideas with her. Free books, boomerangs, and T-shirts are routinely handed out in connection with the visits.

# Adding a Cultural Dimension

In a move to extend interest in the boomerang from the playing field to the drawing room, from sports to culture, Jacques Thomas of Lyon and friends have organized the La Perouse Boomerang Club of France. The name honors a French explorer with an interesting connection to Australia and the boomerang.

Founding father of the French boomerang federation some years ago, Thomas, an exheliocopter pilot and author of the recent magnum opus *Magie du Boomerang*, has evidently cut most of his ties to that orginal organization to take this new, intelligent track. With Australia increasingly in the news (1987 America's Cup yachting defense in Perth, 1988 nation-wide Bicentannial celebration), Thomas will work through the Australian embassy and Franco-Australian Cultural Association to forge cultural links.

The La Perouse group is already planning a ceremony at Botany Bay, south of Sydney, along which is to be found the Australian Aboriginal colony of La Perouse, home of the late thrower Joe Timbrey, in January 1988---opening month of the Australian Bicenntennial celebration. La Perouse landed at Botany Bay 200 years before that date on his voyage of exploration, which ended with his death later in the New Hebrides. It was at Botany Bay where Captain Cook had first discovered boomerangs a few years earlier.

In addition to Thomas, officers of the new club are Denis Lemaitre, a navy officer at Brest, and Emmanuel Strich, a lawyer working as a business consultant in Versailles. Honorary members include descendants of Count de La Perouse, as well as several persons around the world who, in the words of the organization, "have particularly well served the cause of the boomerang over many years"----Max Hoeben of Holland, Brother Brian Thomas of Australia and Ben Ruhe of the United States.

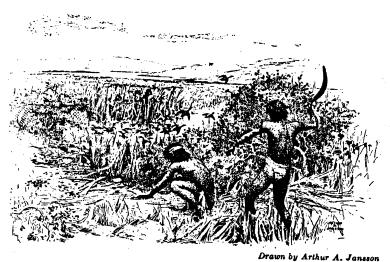
Among its activities, the La Perouse Boomerang Club will issue a bulletin in French, with digest available in English.



# News From Australia

A visit to Perth by a U.S. demonstration team in conjunction with the America's Cup yachting defense by Australia in January '87 remains a possibility. Organizers there have obtained use of a football oval complete with grandstand, liquor bar and eatery and are hunting for a corporate sponsor to pay air fares. Details in due course....A Wham-O triblader sent on by Ben Ruhe reached the hands of Ken Colbung of Perth, an Aboriginal leader. Colbung was not pleased with the 'rang. "When you've thrown one of these things a few times," he was quoted in a Perth newspaper, "you lose interest because there's no challange left. Nothing should be allowed to detract from the intellectual involvement By "real," Colbung with the real boomerang." evidently means two-bladed, ignoring or perhaps unaware of the fact that several Australian museums show off Abor iginal four-bladers collected about the time of contact with whites. Sam Blight, a Midlands boomerang manufacturer, took prompt issue with Colbung, as quoted in the same newspaper: "While I'm a great admirer of Ken's work in popularising the art of the boomerang, and though I respect his extensive knowledge in this area, I must put another point of view on developments in boomerang technology," says Sam. "Any improvements to design which make boomerangs more accessible, safer and easier to use can't be all that bad. The great flowering of design creativity both here and overseas, in no way threatens the purity of the sport. No doubt the Aboriginal boomerang masters of old used the technology at their disposal to the fullest extent to produce their marvellous come-back sticks. I can't agree with Ken's implication that using anything but a traditional boomenang necessarily detracts from the manual and intellectual involvement with the real boomerang. Not to develop this incredible Aborginal invention to the extent that the 20th century aerodynamics and materials allow would be to neglect the full potential of this amazing legacy of Australia's first people.".....The Australian government has allocated \$8.1 million to sponsor so-called low profile sports during the 1988 Bicentennial celebration Down Under, with boomenang throwing as one of the 61 recipient sports. A proposed boomenand world cup series is expected to involve teams from five foreign counteries, including the U.S. and France, and be held at three Northern Territory sites----Alice

Springs in the center of the continent, the monumental Ayers Rock nearby, and Da rwin in the tropic north. Details on the '88 matches are being worked out by the Boomerang Association of Australia....In recent elections, the BAA elected boomerang manufacturer Peter Byham of Barooga as president, succeeding Dennis Maxwell, who became secretary. Treasurer is Andrew Lewis and senior vice president Mark Shafer. Geoff Kennedy becomes the new editor of the BAA bulletin....The latest newsletter from the association documents a year of tournament record-keeping by statistician Chris Henzgan, the transplanted American music teacher, who comments that records on the 20 championship held throughout Australia during 1985 produced a valuable permanent record of the individual throws, will help in selecting teams for national and international competitions, permits throwers to keep track of their own path, enables tournament organizers to handicap throwers as needed, permits long-time achievement awards based on facts rather than memory, assists in the establishment of achievement records, and charts the progress of the sport in general. Henzgen has computerized the statistics and makes them freely available to individual players upon request and payment of mail and copying fees....At a practice session in Ermington, Bob Horton, a relatively new thrower, racked up a 51.02 second MTA throw with a catch, the best such effort yet in Australia. There were three timers....The much-heralded book on boomerangs by journalist Paul Bryden and Sydney boomerang shop king Duncan MacLennan is stalled over a legal guarrel stemming from an inadequate verbal agreement between the two.



Driving ducks into a trap with a returning boomerang

## Magical Boomerang Trail

Posted to Rome last year by his teaching order, the Christian Brothers, Brother Brian Thomas managed to spread the word about boomerangs all over the European map. The Summer '85 issue of this newsletter carried an account of the first portion of his stay in Europe. Now, in this delightful sequel, Brother Thomas, the Australian national boomerang coach, details his six weeks of travel across the Continent after completing his Rome assignment.

#### By Brother Brian Thomas

Universal comedian Danny Kaye, after his first UNESCO trip around the world, declared that children all over the world are the same. After my six weeks' lightning tour of much of Europe, I could say the same of boomerang throwers. Their enthusiam and dedication and skill are much the Small groups cluster same where ever you go. together and talk designs. plywoods used. accomplishments with different 'rangs, etc. If the Zoo had a Boomerang Thrower's Cage we could all be put in the same pen and no one would know the difference!

On a few occasions my acquaintances didn't have any English (the only language I know!), but boomerang sign language made hints very plain to them. One very common trait was certainly HOSPITALITY...thanks to all the wonderful people I encountered on this magical trail!

Where did it all begin? Well, it nearly never began...right in Melbourne, Australia. As I went through the security check at Tullamarine Airport the security guards told me they wanted to look inside my bag because there was a suspicious looking shape in there. Fortunately they didn't decide to confiscate my boomerangs!

My first throw in Europe came after a 16-hour ride from Rome to Vienna, where it was minus 15 degrees on arrival. There lives the Abominable Snowman of Austria, Dr. Ernst Duda, who soon had Br. Rod Shoebridge and myself out in snowboots, gloves, overcoats and hats throwing in the Viennese Woods for three-hour sessions; he then fed us, and after that it was back out into the snow for another hour or two of throwing! What an introduction to European throwing! We followed this rigorous program for four days, before departing for the other cultural pursuits of Europe, like the art galleries of Florence.

During my five months' stay in the Eternal City I coached most of the 27 members of our group in the noblest art of them all. We even held two international competitions, using Boomerang Association of Australia rules. My star find was a Canadian, Br. Aiden Squires, known just as Squi. Squi took out the first accuracy comp using one of Rod Jones' infallible boomerangs.

While in Rome I did manage to notch up five consecutive catches in St. Peter's Square very early one morning before all the police were around with their sub-machine guns, etc.

The first group of international throwers that I threw with were the English group at Littlehampton (southern coast) where I had the pleasure of staving with Herb Smith for four days. Herb introduced me to his latest boomerana 'find'.....paxolin boomerangs. These plastic type boomerangs really eat the wind and shoot out over 60 to 70 metres; they brought many oos and ahs when I used them in Germany. I found Herb to be a very strong and consistent distance thrower, regularly pinging his 'rang out past the 100 metre mark and beyond. He has a wonderful ground to throw on too, something we find hard to come by in Australia. John Jordan's Isle of Man three-blader is an amazing 'rang too, the only multi-blader l have seen that goes over 40 metres.

From England we crossed into Ireland when the first religious service I attended, five minutes after landing, was becomer and throwing in a nearby paddock with Br. O'Grady. From Ireland we passed to Bonnie Wee Scotland where we spent four great days with Mike Hanson and his two delightful children, Rufus and Katja. From here we travelled to the fabled Isle of Skye, just to set a consective catching record of 16 before the usual thick Scottish 'mist' moved in. Our third Scottish stopover was with 71-year-old Bill McGovern in Edinburgh. Here we enjoyed a throw in the Royal while the Queen actually Park, was in residence...we suspect we saw her peeking over the wall at our throwing! Who knows? Bill was amazed at the small size and weight of our boomerangs, and how well they stood the wind. Most of Bill's are in the Big Brigade. He has a most unusual workshop hidden away in the attic with a pull down ladder to take you to the promised land. Fat people would not enter his 'kingdom'! (I just saueezed through!)

After half a day seeing London, we travelled to historic Deal, home of boomerangers Dave and

Veronica Jones, marketers of Bakwood boomerangs. Deal was the place where Julius Caesar landed in Britain, just up the road from the White Cliffs of Dover.

A ferry crossing of the English Channel, and then a long train ride from Ostende in Belgium to Koln (Cologne) and down the really beautiful Rhine Valley brought us to the scene of our one and only European comp at Mainz. Here 70 enthusiastic throwers camped for two days in the school gymnasium. Rain washed out competitions on the first day, but the Sunday proved very successful. Three individual events and two team events (accuracy and relay) made up the programme. Final placings were given according to the over-all results in all five events. I found the Germans have an openness and freshness in their approach to events, since they are not yet tied to tradition in any way. The basic skills are tested, but they vary their approach each year. To me it is a very alive way of throwing. Most of their throwers are in their 20s and are making their own boomerangs. Both of these factors suggest a healthy future for boomeranging in Germany in the next 30 or 40 years. While their throwing skills are excellent I did find a few weaknesses in their approach. They tend to make boomerangs far too sharp, and usually too big. Neither qualities are really needed for good competitive 'rangs. The other more disturbing aspect was their lack of safety in throwing. Quite a number of throwers would be throwing at once in the same area, and often warnings were not called out when a boomerang was coming near someone. The English throwers were prepared to take risks on this too. I do feel they should control their enthusiasm in this regard for the good of the sport, since injuries are never a good advertisement for anything.

On our first night there they auctioned off boomerangs (mostly from the Byhams) to raise funds for the National Boomerang Federation, while on the second night dozens of prizes were given out. The Australian team (Peter and Joan Byham, Br. Rod Shoebridge, Br. Vin Hawley and myself) won the team relay event causing great joy in the Aussie camp. The organization of the whole weekend was excellent and a great credit to Gunther Veit, Joachim Neib and the other organisers. Peter Wahl's auctioneering was masterful. He even sold his socks!

My last boomerang activity in Mainz was at 11 p.m. at the station while waiting for the train to Lourdes. We met an old Polish man with very little English, who was fascinated with my flickerang. "Wunderbah!" he cried, and he was even more delighted when I gave it to him to keep. He presented us with chocolate, making us the winners.

After a few days in Lourdes and then a few more in Paris, we pushed on to Max Hoeben in Amstelveen, Holland. Max and Tonny cared for us very well, and we managed to throw with some of their throwers on the first night (I had to watch, owing to a torn muscle sustained in Paris when trying to pick up a very, very heavy bag for Next stop was Belgium, where Yves someone). Simonson picked us up and showed us around Brussels, and the following day Brugge and Waterloo. Again we enjoyed a throwing session with the Belgian throwers in a beautiful park, and traded a few boomerangs. In demonstrating the wonderful flight of Herb Smith's Marathon paxolin boomerang I succeeded in putting it into a distant tree. When we left, we still hadn't been able to spot it, let alone get it down. The Belgian Association took us out to a Greek restaurant as a special treat.

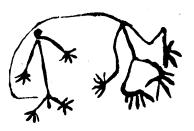
A night train then took us to East Berlin, where we passed through Checkpoint Charlie to throw and visit with Matthias Kutschera and his family and friends. Good quality wood is not available in East Berlin, so Matthias was delighted with Rod Jones' Road Runner, which he threw very accurately. On the second time through Checkpoint Charlie I threw a cardboard crossblader inside the custom check, and it landed on the back of a blonde East German female guard. The East German guards do not smile easily!

From Berlin we went to Kiel on the northern edge of Germany, where Jens Behrmann and Susanne Koehler cared for us. Jens advertised my arrival and demonstrations. However, at the scheduled time for throwing it was raining and windy. We went to the ground just the same only to discover a crowd of 300 people waiting under umbrellas to see the throwing. Such enthusiam! Fortunately the weather slowly cleared and we ended up demonstrating and teaching for three hours. The following morning a similar session took place. Jens now has a very active club going with meetings every fortnight. And they are making the smaller and blunter Aussie-type boomerangs. Jens presented me with a special boomerang while I was there (Last October, I used it to win the Albury championship. Danka, Jens.)

After stops at Frankfurt and Munich, we moved on to Austria once more and the ever-keen Dr. Ernst Duda, whose collection had grown immensely in six months. So again it was much throwing with the dedicated doctor and also with Frau Brutmann and her family. Here we had our second media coverage, the first being in Kiel. Frau Brutmann had taken an excellent Super 8 coverage of our snow-throwing period, which she kindly presented to me as a lasting souvenir. Our last day there was spent sailing (she has a skipper's licence). We even decended the depths of an authentic Austrian wine-cellar, and sampled the wares.

My final fling was on the island of Rhodes, where once stood the mighty Colossus, one of the Seven Wonders of the World. I was able to teach our host, Tom Tsoukalas, the noble art on a wind-swept small soccer field in the hills, and leave him with a Binghi omega to carry on the tradition.

The last flight landed in Australia...home at last.



# 'The Best Of Both Worlds'

The South Georgia Boomerang Club repeated its "throw-in-one-year-catch-in-another" rite last New Year's Eve on a floodlit softball field, with member John Derden adding a twist to the proceedings. Responding to his wife Carolyn's wistful remembrance of a time prior to the introduction of boomeranging into their household when the turn of the year was celebrated by an embrace and a kiss, rather than a throw and a catch, Derden launched his boomerang in 1985, ran over and kissed Carolyn, turned and located his hovering boomerang, and made the catch in 1986. "Ah, the best of both worlds," he says. "Who says boomeranging has to lead to the breakup of families and the weakening of the fabric of society?"

# Personalities

Ali Fujino, immediate past president of the USBA, has resigned her Seattle Museum of Flight job and become a full-time entrepreneur, working out of her lovely Japanese-style house in Bellevue, WA. She is representing a big Japanese corporation in the U.S. and doing some book writing and publishing. Working with the editors of Science 86, her first venture in the book field, while on the Museum of Flight staff, was a big success. The Paper Airplane Book: The Official Book of the Second Great International Paper Airplane Contest. published by Random House, has best-seller sales around the country....Doug DuFresne of Portland, OR, made his third trip to Australia in April and spent a lot of his time hobnobbing with boomerang pals from the 1981 U.S. test matches with Australia there. He competed in the Aussie national championships at Adelaide, and along with his wife Diane visited boomerangers in Melbourne and the Bunny Read clan in Wycheproof. They topped it off with a week on the Great Barrier Reef for scuba diving....Jill Jacobson of the University of Minnesota/Duluth plans a boomerang club at the school. "We are looking forward to expanding our outdoor enthusiasm into the boomerang realm," she writes....Atty. Hugh Sumers recently held a boomerang throw and kite derby for the Palestine, TX, scout troop with which he is affliated....Fresh from his trip to Tokyo to appear on Japanese national television as a boomerang throwing expert, Barney Ruhe of New York City got a second paid trip overseas, this one to Rome to appear on a TV special about strange aspects of life in the United States....Callie and Ray Laurent of Newport News, VA, have a new son Ray Jr., who should grow up to be a wizard boomerang thrower, in the tradition of Baby Ben Loveland of Australia. Ray was runnerup in the USBA nationals last year and Callie easily the star woman competitor....Henry Wallace, Franklin Roosevelt's last vice president and a presidential candidate himself in the late 1940's, is the subject of a new biography by historian Ted Wilson of the Hall Family Foundation for the Humanities in Kansas City, MO. Described as "a bureaucrat from beyond," Wallace is presented as one of the stranger figures to ever gain political fame in the U.S. Possessor of a probing, original intellect, he interested himself in such subjects as spiritualism, Indian religious rituals, theosophy, reincarnation, weather forecasting. Tibetan

mysticism, communication with plants ---- and boomerangs. Wallace's early morning boomerang throwing sessions with Washington bigwigs such as Supreme Court Justice Jackson were a staple of Washington press photography coverage in the 1940's

# Contents of a Boomerang Bag

The Magpie Boomerang Bag Contest sponsored by this newsletter is long over, but a late entry by Ron Kerner of Setauket, NY, demands printing, for reasons that will be obvious:

"Since I had no idea what had accumulated in my boomerang bag ( a flight bag from Flying Tiger Airline, with an external pouch), I turned it over to see what would emerge. Aside from several boomerangs, the standard gear that most throwers carry was present. This included the usual herbs and spices-cumin, to rub on the trailing edges of a 'rang so that it will be cumin back when thrown; bay leaves, for spreading around the field to keep unwary spectators at bay; and thyme, which adheres well to a 'rang coated with a little rubber cement, for aetting maximum thyme aloft. (This winter 1 am growing several varieties of thyme to test their aerodynamic properties. THYMA INVERTICA, or Australian thyme, looks most promising. Results will be published here next fall).

"Also included were a thermometer to determine if boomerang fever is present, and a recording of "My Boomerang Won't Come Back" to cure it quickly; a box of pineapple upside down cake, a favorite Australian snack; Annette Funicello--yes, you're right, I haven't yet read How to Catch a Flying Boomerang Without Using Annette, a peanut butter soaked cloth; a mirror, the graphic device I use to explain how I get a boomerang to return; a bottle of Pussers rum, reminiscent of the line in the poem "The Lovesong of J. A. Ruhfrock" that goes "One shot for the boomerang, two shots for me, and we'll both be flying as you'll soon see"....; and last some lint from the bottom of the bag, which I can only assume is from my boomerang made from marine plywood, this structural material having had a navel history.

"Nothing out of the ordinary, really."

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## Around and About

Ted Bailey's MTA technology, not to mention his boomenangs, are really getting around and winning Gary Brodbent of Cleveland converts all over. scored a 1 minute 14 second flight, with catch, while Turner Ragsdale, the ex-tennis pro on home leave in Birmingham from the Navy, got 45 seconds and Dr. Ernst Duda, far away in Vienna, Austria, clocked 44 seconds. Bailey reports that he is having almost too much success with his tuning. He has lost some 10 of his floaters when they went into autoration after launch, took on altitude, and eventually disapeared from sight, never to be found again. "My best boomerangs!" he laments....George Reitbauer, member of the 1984 U.S. boomerang team, decided to meet his fascination with things Australian head-on. He took a one-year exchange teaching position in Melbourne, through next His address is 28 Albion Court. December. Greensborogh, Victoria 3088, Australia.....Michael Girvin, captain of the West Coast boomerang group called Team Gel. has shifted operations from San Francisco to Olympia, WA, where he has enrolled as a student at Evergreen State. The heavy rainfall and lack of throwing space because of all the trees have him down on his new home as a place for boomeranging, but he intends to make up for these hazards by exercise of the mind. He plans a thesis on Australian Aboriginal use of the boomerang in the 18th and 19th centuries, as reported in early Choice findings by Girven will be literature. reproduced in this newsletter in due course.....It had to happen: A Halley's Comet boomerang, the perfect symbol of a comeback. Kenny Cole of Brooklyn and a friend crafted several such 'rangs with appropriate starry sky and white, whispy tail decor. Collector's items indeed....Living near Mount Crested Butte, a ski resort in Colorado at 8,000 feet altitude, Jim Mayfield found he had to craft his own boomerangs with high lift to get decent performance in the thin air. Anyone living at high altitude needing equipment tailor-made for a rarified atmosphere should contact Mayfield for his commercial models, available in a variety of shapes Write him at 209 S. Colorado St., and sizes. Gunnison, CO 81230....Marriages in the boomerang world: World champ Chet Snouffer wed fellow gymnastics teacher Carmen Foster and they are planning a kites-boomerangs tour of French beaches this coming summer as a honeymoon. Meanwhile, Jerry Caplan, host at last year's USBA

Nationals, married Doris, co-host for the tourney. Their family wedding present was a performance in the backyard by a professional flamenco troupe. Spectacular!...John Mauro, president of the USBA, retired in late winter from his job as director of for the bia Richmond-based research communications firm Media General. With a less hectic schedule now, he says he will be able to devote more time to fund-raising for the USBA and the statistical work required as a new player ratings system is put into effect .... People with surprisingly large, even enormous, collections of boomerangs keep surfacing. A new name: Peter Sferra of Los Altos, CA, who has a collection of some 370. A 30-year-old graphics artist working for Lockheed, Sferra got hooked while in college. "It was a simple case of an absolute love for boomerangs," he says, "and a desire to test and evaluate all of the types I could get my hands on." If Sferra particularly likes a given model, he gets a number of them, then modifies them "with everything from spoilers to maneuver flaps (often with disastrous results)." His absolute favorite? "An applewood Al Gerhards hook." He concludes: "I think boomerangs are the most fascinating and rewarding recreational device in existence."

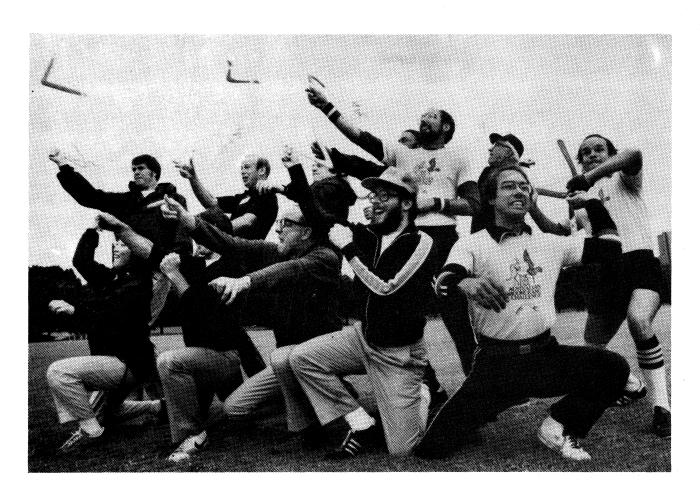


MacKay district, Queensland.

# **Computer Correspondence Invited**

Michael Cerda (3502 Goodwin Ave., Austin TX 78702), a graduate student at the University of Texas, writes the following:

"I am interested in entering into correspondence with others concerning the theory of boomerang flight. Particular interests include fluid dynamics and computer simulation. Education and information distribution are also a concern. My background is mathematics and computer science. I work for the University of Texas and can offer some of our excess cpu cycles to help with some of the computational problems. If anyone reading this has access to any electronic mailing facilities my network address is: Arpa: cerda@NGP.UTEXAS.EDU or uucp:{ihnp4/ut-sally/seismo/allegra} !ut-ngp! cerda."



Here's a historic photograph from the USBA archives---a never previously published shot of the '81 American challenge team in Melbourne before its first test match with Australia. On a chilly, blowy day, the upstart Yanks edged the Aussies, to the surprise of almost everybody, and went to sweep the series. From the left, top row, Al Gerhards, Doug DuFresne, Dr. Steve Miller, Eric Darnell, Dr. Larry Ruhf, co-captain Carl Naylor, Barney Ruhe; bottom row, manager Ali Fujino Miller, Chet Snouffer(face obscured), captain Ben Ruhe, Jerry Caplan, and Peter Ruhf. Photo by David Austin.



Photos of the William Tell stunt are common enough these days, but this one by Alain Ernoult is so exceptional it deserves reproduction. The player is Eric Darnell of South Strafford, VT, runnerup in the World Master's Cup tournament in Paris last summer.

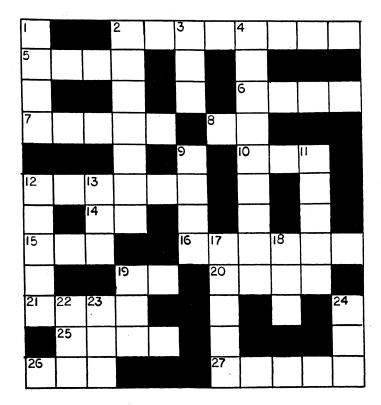


Dr Lorin Hawes (left) of tropic Queensland paid a visit to the Cleveland area in the chill of winter and put on his best resignation face for H.L. Mayhew (right) and other fans who turned out to pay him honor. An expatriate American, Hawes was in the U.S. on family visits. Ted Bailey and Gary Broadbent were among those who put on a demonstration for the visitor, With Bailey getting an impartially timed MTA clocking of 1 minute 45 seconds, with catch, with his first throw of an untested boomerang out of his bag.

Photo by Elfrieda Saylor

## **Boomerang Trivia**

by Ted Bailey



#### ACROSS

Designer of the world famous 'Oregon Hat' 2. Boomerang organization based in the USA 5. 6. \_ DUCK design by Barnaby Ruhe 7. Man who set two world records in the same day (1985) 8. Abbreviation for Australian location ( hint: down under ) three initials on the obverse of the collectible Janetski boomerangs 10. 12. Man who organized the 1985 Nationals in Los Angeles Mayhew wrote two books about boomerangs 14. First name of the mini-MTA designer 15. 16. Unit of measure in MTA and fast catch 19. boomerang won't come back 20. A common material for adding weight to boomerangs 21. Australia has lots of this A body \_\_\_\_\_ is allowed in a one-handed catch \_\_\_\_\_ Blight makes beautiful 'mock inlay' boomerangs in Australia 25. 26. 27. The first \_\_\_\_\_ master's cup was held in Paris in 1985 DOWN 1. Man who holds the world record for the distance event 2. Co-authored a book with Ben Ruhe in 1985 3. Boomerangs are 4. A relatively new event on American shores 9. Famous Aussie boomerang craftsman in the 1950's Australian \_ \_ \_ \_ \_ 11. 12. Fast Larry, Lorin and Felix each have one of these 13. 17. The arms attach at the An. American hardwood often used in finely crafted boomerangs 18. Abbreviation for an American event that is often referred to as 'slow catch 19. in Australia 22. Abbreviation for 'extended time aloft', a less commonly used term for 19 down 23. Lorin Hawes coined the term 'Dingle \_\_\_\_ Jones makes beautifully finished boomerangs in Australia 24.

## "The Obsession With Exertion"

Humor pieces on boomeranging can sometimes be more revelatory in their way than straightforward articles on the sport. As an example of this recurring genre, the following column home on the curious doings of the American natives and one of their national crazes is reproduced from the London Daily Mail of Nov. 18, 1985. The author is the newspaper's American correspondent.

#### by Dermot Purgave

<u>New York</u> - Chet Snouffer went to Paris and came back world boomerang champion. The boomerang distance record, 375 feet, is held by another American and this year boomerang sales here could top £13 million. Boomeranging is 14,000 years old - many happy returns - but it has never boomed like this before.

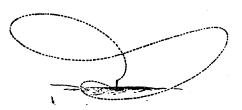
Nobody is quite certain why the inner mysteries of ancient Australian culture should suddenly exert a hold on the American imagination - 'It is hard,' says one fan, 'not to admire a piece of wood that can find its own way home.' - but they have and boomeranging has now become an established part of the national obsession with exertion.

The Cleveland boomerang school alone has passed on the technique of throw-and-catch - or throwand-duck--to about 30,000 people but, of course, what most Americans still don't know about boomeranging would fill a book and, considerately, Ben Ruhe and Eric Darnell have just written it.

This would probably be a good time to get into the glazing trade or the ambulance business, for each copy of <u>Boomerang</u>: How to Throw, Catch and Make <u>It</u> comes with a snazzy red boomerang that has an irresistible throw-me feel to it and soon the air will be thick with spinning missles and the courts and the newspapers will be full of boomer-anger and claims for damages.

Ruhe, whose love affair with curved sticks blossomed when he worked as a jackaroo in Australia, is acknowledged as the father of American boomeranging and his venerated status was confirmed when he was appointed boomerang consultant to the Smithsonian Institution's Air and Space Museum, for which he organized an annual tournament on the Mall in Washington.

Analysing this new enthusiasm for old antipodean projectiles, he says: 'Boomerangs are the thinking man's frisbee. Part mystery, part science, mildly



eccentric and very good exercise, the boomerang matches the temper of our time.' Eric Darnell, who gave up designing windmills to make boomerangs and was the runner-up to Snouffer in the world championships, says its more transcendental: 'It allows you to think like a bird.' Hmmm.

They credit a Briton, Herb Smith, with reinventing the boomerang about 15 years ago and setting new standards for craftsmanship and performance

Americans get intensely serious about their leisure (thus there is a boomerang school in Cleveland, a place so unoutbackish that its pollution-laden river once caught fire). And so, not long after Ruhe began his missionary work, Yale's Peabody Museum was offering a boomerang seminar, the hills were alive with the sound of profound debate about gyroscopic lift and airfoil styling – one of the leading theoreticians on boomerang aerodynamics designed the control systems for the Minuteman missile – and it wasn't long before America was ready to take on the world.

They started, of course, in Australia and, to considerable local shock, swept a series of three-Test matches and returned with the Boomerang Cup. In 1984 the Australians came here and avenged themselves but at the recent World Master's Cup Tournament in Paris Snouffer and Darnell vanished Australia's best two throwers and six from Europe.

They are two of the few who dare to perform the terrifying William Tell stunt – launching a sharp boomerang so that it comes back and slices an apple balanced on the top of your own head. A little off on this one and it's lobotomy time.

The William Tell is not the only hazard. There is some evidence of a distressing condition – boomerosis, perhaps – caused by over-exposure to something you can't throw away. The greatest living expert on boomerang behaviour, a Dutch scientist called Felix Hess, who got a Ph.D. for his celebrated thesis, <u>Boomerangs</u>: Aerodynamics and <u>Motion</u>, suddenly decided one day he'd had it with boomeranging, just couldn't take it any more. He's now studying the Papua frog in New Guinea. He may never come back.

## In Reply

Jacques Thomas' wonderful, massive new book *Magie du Boomerang* (available from him by mail at about \$25 at 24, rue Tronchet, 69006 Lyon, France) was reviewed last year in this newsletter by Cheslye Larson. M. Thomas writes that "I'd like to add some comments to the much appreciated review, which may complete it and may be some way useful to the readers of *Many Happy Returns*:

"As far as I know, there are no Aborigine tribes having known the boomerang and living in a traditional way in Australia. Being in the country in 1978, I inquired very much about that fact and discussed the matter with several specialists. Some tribes in the central desert are still using killing-sticks, but not boomerangs.

"In the book, I say that as a safety precaution you should attempt to catch a boomerang that is coming in only when it is at a level lower than your face. Not the contrary.

"In France, even in the country, it is not always easy or possible to find a nice well cut grassy field to throw. Have you ever thrown and lost a boomerang in high grasses or among furrows in a ploughed field, not knowing at all where the hell it could hide? I remember quite well the time I often spent in searching for my boomerangs - after 20 or 30 minutes vainly lost, with a heavy rain coming, you are not disposed at all to chuckle! Later on, I started to proceed methodically and I recovered my boomerangs much more easily. Why not help beginners and even some other throwers in that respect? I think it is important. When piloting a military plane in search of something or somebody on the ground, I did not proceed another way.

"Concerning the style of writing, everybody writes and explains things as he has aptitude and feels it the best manner of doing it. Almost 500 copies of my book have already been dispatched and the style seems to be appreciated according to the lot of letters I receive.

"Now, last but not least, the topic of women as boomerang throwers. Quite fascinating it is. For years, I observed that almost all girls and women that I saw throwing a boomerang for the first time had much more difficulty than boys and men to get the necessary fast and strong enough gesture. I discussed the matter with two women who are my friends. The first was a physician. The second, a tennis teacher. So I happened to know that, in France at least, women generally have more difficulties."

# Aboriginals in Action

Since some boomerangers have come to the sport through their interest in anthropology, this newsletter periodically reproduces exerpts from early literature on the subject of Australian Aboriginals and their boomerangs. Evewitness accounts of Aboriginal throwers in action, no matter how exaggerated the distances cited often are, are of particular interest. The following account was unearthed by Ray Rieser, USBA treasurer, during the course of his volunteer work at the Carnegie Museum in Pittsburgh. It was written by Alfred W. Howitt of Bairnsdale, Gippsland, Victoria as a letter to the editor in the July 20, 1886 issue of *Nature* magazine:

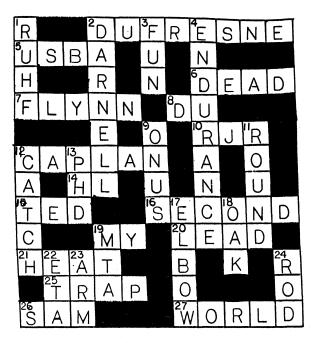
"The boomerang throwing.....took place on the open flat lying between the River Mitchell and its branch known as the Blackwater. It was open and well suited for the purpose, but a sea-breeze was blowing. There were present eight black fellows from different localities, extending from the Mitchell River to the Snowy River. Among them was Lamby, Toolabar, a brother of the man Barny, and Long Harry, the acknowledged boomerang thrower of the whole district; so much so that when I suggested that he should be called for the future 'Bungil Wunkun', 1. O. 'He of the was Boomerang', the term received with acclamation and it was not improbable that for the future this may be his native name. The only boomerang we had was one of the 'marndwullun' or returning sort. Throws were made by all, and the defects of the throws as well as of the instrument pointed out by one or the other almost in the same terms. One arm of the boomerang was held to be too much curved for the instrument to return near the thrower. The throws proved this to be the case, as it was evidently impossible for the thrower or the spectators to tell exactly what the course of the missile would be in returning. In some cases it flew past over our heads and fell in the rear, at others flew in the opposite direction far to the front. The explanation of this given me was that it was partly due to the uncertainty of the boomerand's return flight unless a rare perfection

in make, and partly due to the wind which affected its course. I found that the throws could be in two classes, one in which the boomerang was held when thrown in a plane perpendicular to the horizon, the other in which the plane of the boomerang was inclined to the left of the thrower.

"In the first method of throwing, the missile proceeded, revolving with great velocity, in a perpendicular plane for say 100 yards, when it became inclined to the left, traveling from the right to the left. It then circled upwards, the plane in which it revolved indicating a cone, the apex of which would lie some distance in front of the thrower. When the boomerang in traveling passed round to a point above and somewhat to the right of the thrower, and perhaps a 100 feet above the ground, it appeared to become stationary for a moment; I only use the term hovering to describe it. It then commenced to descend, still revolving in the same direction, but the curves followed was reversed, the boomerang traveling from left to right, and the speed rapidly increasing, it flew far to the rear. At high speed a sharp whistling noise could be heard. In the second method, which was shown by 'Bungil Wunkun' and elicited admiring ejaculations of 'ko-ki' from the black fellows, the boomerang was thrown in a plane considerably inclined to the left. It then flew forward for say the same distance as before, gradually curving upwards, when it seemed to 'soar' up--this is the best term-- just as a bird may be seen to circle upwards with extended wings. The boomerang of course was all the time revolving rapidly. It is difficult to estimate the height to which it soared, making, I think, two gynations; but judging from the height of neighboring trees on the river bank, which it surmounted, it may have reached 150 feet. Then it soared round and round in a decreasing spiral and fell about 100 yards in front of the thrower. This was performed several times. The descending curve passed the thrower, I think, three times. Other throws were spoiled by the wind, which carried the boomerang far to the front. I observed and some of the aborigines confirmed it. that the thrower perferred throwing with the wind. Another method of throwing was mentioned, namely, to throw the boomerang in such a manner that it would strike the ground with its flat side some distance in front of the thrower. It would then rise upwards in a spiral, returning in the same. This was not attempted as it was decided the boomerang was not strong enough. A final throw in a verticle plane so that the missile struck the

ground violently fifty or sixty yards in advance terminated the display. It ricocheted three times with a twanging noise and split along the centre. My black friends said that they would soon manufacture a number of the best constructed 'wunkun' to show me. I observed that the spectators stood about a hundred yards on one side of the thrower, and when the boomerang in its gyrations approached us every blackfellow had his eyes sharply fixed on it. The fact stated by them that it was dangerous was well shown in one instance, where it suddenly wheeled and flew so close over us that I and Toolabar fell over each other in dodging it. The expression used by them was 'Marndwullun no good for fight; if he no hit'em man, might come back and hit your friend beside you.' I questioned the black fellows as to whether they thought a boomerang could be thrown so as to return to the hand of the thrower. Seven said 'no' and characterised the statement as 'jetbollan' i.e. a falsehood; the eighth said that he once made a boomerang that when thrown on a calm day with great care would gyrate round and round until it descended to the ground not far from him, moving as slowly as a leaf falling from a tree, and that he once ran forward and nearly caught it. He said also 'no Kurni (blackfellow) can catch a wunkun when he flying--he would cut his hand open.' '

#### Solution to puzzle on page 14



## Tuning Tips

For the second printing of the Ruhe-Darnell book Boomerang issued by Workman Publishing (reviewed in newsletter Nos. 24-25), co-author Eric Darnell has added a succinct section on tuning your boomerang which is likely to be helpful to many. It is reprinted forthwith:

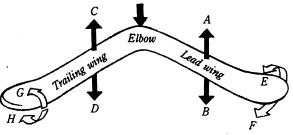
To adjust lift: For more lift (calm conditions), bend the lead wing up toward A; for less lift (windy conditions), bend the lead wing down toward B.

To adjust range: For a longer-range flight, twist the lead wingtip toward F. You can also tape a quarter (25¢) on the underside of the lead wingtip (behind the molded undercut) to further increase the range of your boomerang. For a shorter-range flight, twist the lead wingtip toward E. The latter tuning adjustment gives good

returns for less-powerful throwers.

*To adjust hover:* To increase hover, bend the trailing wing (near the elbow) up toward C; to decrease hover, bend the trailing wing down toward D.

To adjust spin: To help maintain the spin rate, slightly twist the trailing wingtip toward H; to help shorten the range and decrease the rate of spin at the end of the flight, slightly twist the trailing wingtip toward G. The trailing wingtip is more sensitive to adjustment, so twist it less than the lead wingtip.



## Throwing Underhand

The author of the following is a University of Illinois student and a long-time boomerang throwing expert.

#### by Paul Sprague

I've made an interesting discovery that may shed light on the nature of boomerang flight. A while back I recalled an article that appeared in Many Happy Returns concerning underhand throwing; 1 remembered an S-shaped stick with funny airfoils. The more I thought about an underhand throw, the more I became convinced that it was impossible, until | did it myself! | stumbled over this feat quite by accident with a Nerf 'rang." A fellow boomeranger here at the university was trying to get his Nerf to come home with a sidearm toss. Recalling what dihedral does to the shape and maximum height of the flight pattern, I suggested that he give a little negative dihedral to make a good vertical circle without going off to the side.

This worked well, and I started thinking that if you could stand the flight circle on end, why not lean it over the wrong way?

More and more negative dihedral compensated for more and more layover until I was bringing back completely underhanded throws. The wings were bent pretty far down by this point, but it was coming right back. But this was only a Nerf. Would it work with a real boomerang? I tested this out with the most tuneable conventional boomerang, the plastic Boomerang Fever.

I bent the tips down as much as I dared, fearing to break the poor thing. I kept testing it and it kept needing just a little more negative dihedral to keep it off the ground. I finally caught an underhanded throw with the wingtips a full 1 1/2 centimeters below flat from the vertex.

The throw can be backwards, like a conventional throw, only with a real late release; or forwards, with a reverse grip.

The most disturbing thing about making the catch was that it seemed to have precessed backwards. The faster air speed is on the bottom of the rotation rather than the top, and it curves to the right instead of the left. But it still flattens out horizontally for the catch. If the precession principle had its druthers, it would dive into the ground shortly after the stick began to curve.

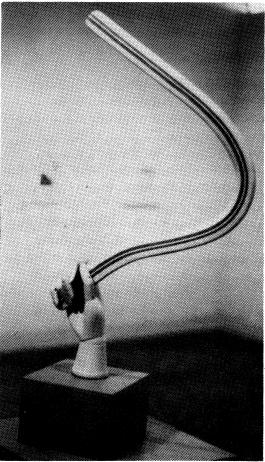
Apparently, the maximum lift point being below the axis of rotation is now sufficient to forcibly tip the spin plane up against the grain for a horizontal return.



Sculptor Pat McCormick with his "Circle of Boomerangs"

# **Boomerangs as Art**

When sculptor Pat McCormick throws things, they don't go away. His "thrown objects" are ceramics and boomerangs. One of several sculptors around the country who have gotten interested in boomerangs as objects of beautiful form and latent kinetic energy, notably Duwayne Hatchette of SUNY-Buffalo and Hugh Townly of Brown University, McCormick recently had a one-man show of his new creations at Western Washington University in Bellingham where he is a professor of art. On one wall, McCormick exhibited boomerangs of varying shapes, colors and designs. "A Circle of Boomerangs," as this section was called, shows, in McCormick's words, the "light-hearted, whimsical guality of boomerangs." Elsewhere, the arts teacher exhibited "Self Portrait," a hand on a pedastal holding a laminated hook boomerang, and an abstract construction consisting of a ceramic column, tree branch and intertwined 'rang. Elsewhere were "Flight," a trail of ceramic boomerangs in motion, and a series of ceramic plates with boomerang motifs and charming titles such as "Hands-On Experience," "Eratica," and "Boomerangs Camouflaged as Buttenflies." Exhibited widely across the country, McCormick got interested in boomerangs for their



"Self-Portrait"

three-dimensionality after reading about them in a June '85 article in Smithsonian Magazine. McCormick comments about his show: "I was amazed at how well these additions (boomerangs) to my usual body of work were received. I hadn't considered strip laminations until the L.A. nationals last summer---now it is the love of my life."

# The Continuing MTA Story

by Ted Bailey

It has been several months since my article on tuning and throwing MTA boomerangs was published in this newsletter and I have received much feedback from it. The purpose of the article is to consolidate the reactions and clarify the information that was confusing to many readers.

I was surprised to find out that several USBA members have broken the coveted 1 minute barrier. Many others have come close with flights in the 40 and 50 seconds category. The boomerangs that were reported as breaking the 1 minute barrier were made by Peter Ruhf, Mike Forrester, Dave Schummy, and myself.

Another comment was the existance of yet another tuning and throwing style for which I have no name. This technique is used on boomerangs by both Forrester and Schummy. The throw is more straight outward and without incline. I do not know how the tune is set. Anyone well versed in this technique should write an explanation for the newsletter.

No, I have not set a personal goal to bring Forrester to ruin. I respect his equipment and throwing abilities. Throwers familiar with both of our techniques and boomerangs have told me that Mike has the competitive edge in calm conditions and I have the competitive edge in windy conditions. Technology is never stagnant. The sport would not be fun without the competitive challenge of other pioneers. I feel that Mike's world record throw of 1 minute and 2 seconds in tournament competition is far more prestigious than my own throw of 2 minutes and 13 seconds in pratice. My report on my achievements to the USBA was primarily to announce the demonstration of feasibility. Whether a throw and catch of more than a minute is done in competition or in a backyard with no witnesses, the accomplishment remains supreme. It's a euphonic high for this thrower.

Readers who acquire their MTA sticks through purchase should be careful to not overtune. Chances are that the boomerang is near a perfect tune when it is received. A conscientious craftsman will throw his creation dozens of times before selling it. The thrower must not mix tuning and throwing modes. Use the MTA boomerang in the mode for which it was initially tuned and sold. Mixed modes can lead to wild flights and breakage.

I would like to emphasize the importance of

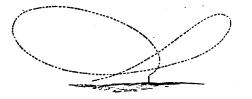
making fine adjustments on the field when seeking record-breaking flights. Much of the feedback I received was from throwers who had a boomerang slightly out of tune and had difficulty exceeding 25 seconds. The most common complaint was that the boomerang made several quick circles and never achieved adequate height for long flying times. It usually takes only a few throws to change this kind of boomerang into a super flyer. Adjustments are usually only needed on the lift (longer) arm.

Rule 1: To achieve more height, bend the lift arm up (easy does it) to add dihadral. The arm should be concave upward. A bend closer to the elbow has more of an effect than a bend near the tip. Do not add too much dihedral. Be careful of bending in cold weather because both wood and glue may be quite brittle.

Rule 2: To eliminate multiple small circles, decrease the angle of attack on the lift arm. Sometimes this is called "adding washout." The boomerang should make one large circle as it climbs near its peak, then it may make one or two more small circles as it settles into a perfect hover for a controlled descent. One symptom of too much angle of attack is the presence of lots of noise as it makes its initial circle. Noise is a loss of energy from too much drag. Add washout and the noise will diminish. However, if you have too much washout, your booomerang may fly straight as an arrow, not unlike an Australian killer-stick kylie.

The MTA story is incomplete without mentioning the father of the MTA boomerang: Wilhelm Bretfeld. It has been several years since this German engineer quietly announced to the boomerang world that he could easily exceed the accepted MTA record (around 25 seconds) by using his unorthodox design of unequal arm lengths. We all owe him thanks for unselfishly sharing his designs and techniques. The recent popularity of MTA boomerangs would be nonexistant without his efforts.

A striking resemblance can be found by comparing the modern MTA boomerang with the Australian Aboriginal kylie. The low drag advantages of unequal arm lengths is inherent in both technologies. The kylies in my collection all have a pronounced twisting, not unlike my MTA sticks. Kylie twisting is more pronounced because of the cruder airfoil and higher weight. Kylies are very much MTA devices. A longer flight has the advantage of traveling a greater distance. It would be a tremendous challange to cross the two technologies to produce an extra long distance throwing stick. Is it possible to develop a kylie that is competitive with the Aerobie? Are there any technologists who are currently developing such a device?



# A Modified Super Catch

With Fast Catch times dropping and MTA times soaring, Peter Jonson of Australia proposed the Super Catch---put an MTA 'rang into the air, pull off the five Fast Catch sequence, then run downfield and catch your hovering MTA boomerang. Voila! An authentic Super Catch. Since then, many adept throwers have attempted this seemingly feasible, but in pratice hopelessly difficult, feat, and failed badly. So Ted Bailey of Toledo, a Teledyne aerospace engineer, has now come up with a proposed modification of the event some may want to try. Here's his proposal for the new competition ----reactions by those who attempt it appreciated by this newsletter:

1. Competitor launches MTA boomerang from center of accuracy circle.

2. Competitor initiates the Fast Catch sequence from the center circle. All additional throws in the Fast Catch sequence may be made from anywhere on the playing field.

3. Competitor makes as many throws and catches as possible before making the mandatory MTA catch.

4. Competitor must be in possesion of the Fast Catch boomerang when the MTA catch is made. This includes, but is not limited to, holding boomerang in pocket, in the hands, under the belt, etc.

5. Competitor returns to the center circle as quickly as possible to stop the clock.

6. The lowest time in the maximum number of catches category is the winner. All competition times in the maximum number of catches category rate higher than all scores in the category with one fewer catch; and so forth.

## **Boomerang Design Factors**

Sam Blight, a young west Australian, is turning out some of the most beautifully crafted and packaged high-performance boomerangs available on the commerical market. Priced rather high, as they deserve to be, for the mass market, the boomerangs have rather surprisingly found a ready market, including the famous Harrod's of London.

Blight's success with his RANGS line is no accident, since he has approached the crucial design element with knowledge and intelligence. Following is an article he wrote for the Boomerang Associaton of Australia Bulletin (No. 45), from which it is excerpted by permission.

#### By Sam Blight

A longstanding appreciation of aerodynamic efficiency has led to boomerang designs with relitively high lift-to-weight ratios with low induced and parasitic drag. (Induced drag is that produced by the shape of an object as a whole, while parasitic drag is that induced by the roughness of, or protusions from, its surface.) The resulting balance between lift and spin, which of course is different in each design, allows good height control and accuracy, once the thrower has adjusted to their inherent flightiness. Unlike many boomerang designs which tend to lose spin and drop guite quickly after only a single circle, RANGS designs, with their pronounced end of flight hover and excellent glide ratios, give the experienced thrower a wide choice of throwing strategies as well as enhanced control over where and when the catch is taken.

An essential breakthrough in the understanding of boomerang design factors for me consisted of an at first intuitive, and later and more usefully, a logical appreciation of the relationship between lift and spin, and their effect on boomerang flight charactistics. The lift in RANGS boomerangs is produced solely by the airfoil profile on the wings, without recourse to drag-inducing twist and undercutting the leading edge of either wing to produce pitch. What undercutting there is, is at the tips and at the right angles to the wing so as to produce the same effect as dihedral, which enables the precise control at the rate at which the boomerang "lays over" from the vertical after launch and starts producing lift for flying.

Too much dihedral produces too rapid lay over

and excessive height gain followed by swooping, Too little dihedral causes the erratic flight. opposite problem of crashing during the turn due to insufficient lay over and height gain. Although dihedral can be adjusted in most reasonably constructed boomerangs simply by bending the wings up or down slightly (cold tuning), we wanted to render this unnecessary as far as possible by "pre-setting" the dihedral by means of wingtip cutaways, being well aware that the vast majority of customers would be unwilling and/or unable to perform such a delicate aerodynamic adjustment and would prefer a "ready to fly" boomerang. As far as I know this design feature is unique to RANGS boomerangs, and one which is unapplicable to boomerangs with cruder, low-lift airfoils.

Oddly enough, the greater the spin or angular momentum, a boomerang has, for a given amount of lift, the greater its tendancy to travel in a straight line, or in practice, the larger the circle it completes before returning. This is because the way in which angular momentum is conserved expresses itself in a tendency to resist any change in the direction in which the axis is pointing. Hence the greater the spin momentum which the boomerang has, the harder it is for the uneven lift over the plane of rotation to deflect or precess the axis and cause the boomerang to turn. If the lift component tends to outweigh that of the spin however, as is the case with a boomerang with long, thin wings and a wider elbow angle, the greater the tendency for it to bank tightly and make a smaller circle. It is by balancing the three basic factors of lift, spin and dihedral that the preferred flight path of a boomerang can be "tailored" with respect to range, altitude, and the shape for a given style of throw.

<u>LIFT</u> can be adjusted by leading edge undercutting or by twisting the tips to increase the pitch, but I have long preferred the more elegant and aerodynamically "clean" approach of selecting the appropriate airfoil section to generate the optimum amount of lift for the design in question.

<u>SPIN</u> or angular momentum can be adjusted by increasing or decreasing the "elbow" angle between the wings. A small elbow angle accentuates spin and therefore range and general stability, but at the expense of lift-producing efficiency of the wings, which, as the angle between them and a line drawn from the wingtips to the center of mass increases, cut the air at a more obligue angle. This can be offset to some extent by "flaring" the tips so that they meet the air at an angle nearer to  $90^{\circ}$ , the optimum angle for producing lift. This takes into account spin only of course, as the combination of spin and forward flight produces an ever changing air flow over the wings in respect of both speed and direction except when the boomerang is hovering down vertically. Spin can also be increased by the addition of weight to the ends of the wings. This can be done by shaping the wings so as to have more material at the tips and/or by actually inserting small weights, lead for example, flush with the surface at the tips.

<u>DIHEDRAL</u> as has been mentioned can be introduced simply by bending the wings upward, or toward the curved surface of the airfoil. Alternately it can be produced by udercutting the wingtips at right angles to the wing. Either way the effect is to move the center of lift forward of the center of gravity during the boomerang's flight. The resulting torque moment causes the axis of spin to precess in such a way that the plane of rotation tilts from close to vertical on launch towards horizontal, and in extreme cases, through the horizontal towards vertical again.....producing a figure-eight flight path.

Of course, as any boomerang maker knows, changing one aspect of design affects all three of the above factors to some extent. For instance, adding weights to the wing tips changes the position of the center of gravity and its relationship to the center of lift, while using a higher lift airfoil may increase drag and reduce spin retention and so on.

The trick is to produce a design which balances these design factors in a way which achieves the desired flight characteristics as well as structural durability. Perhaps fortunately for the poetry of the enterprise, no one has yet to my knowledge qualified the relationships between these factors to sufficiently produce a "design-to-flight" formula. As of now, the designing of boomerangs, as is the case with 12 meter yachts, is as much art as science.







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