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An International Newsletter of the U.S. Boomerang Association

Spring 1987



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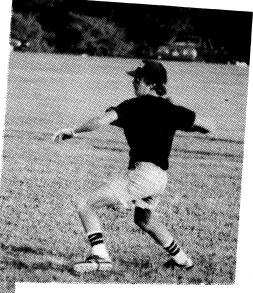
Putting the 'Fast' Into Fast Catch

The author of the following essay holds the world's tournament record for the Fast-Catch event (five catches in a minimum amount of time with the boomerang going no less than 20 meters outward) and the world tournament mark for the very closely related Endurance event (as many good catches as possible in five minutes, with a 20 meter 'rang). The world records are 18.7 seconds and 59 catches, respectively. He is an engineer by profession and lives in White River Junction, Vermont.

By John Flynn

Background

My first sub-30second boomerang was discovered by accident in late 1981 as I was attempting to make an MIA with long, slender arms out of 5-ply, 6mm birch. What resulted was a 'rang that came back straight at my head as it ran out of spin; I had little use for this boomerang because I was unaware of the Fast-



Catch event's existence. Shortly after this, Eric Darnell showed me his latest idea for Fast-Catch, a hollowed-out underside with wide, rounded tips which caused his 'rang to bounce on the wind for a then amazing and unprecedented 46-second return. I thought to myself, "The boomerang I have comes

(Continued on page 6)

President's Column

by Ted Bailey

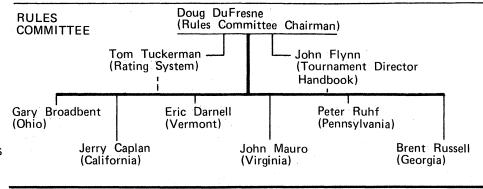
1987 USBA Rules and Rating System

The 1987 Rules and Rating system booklet has been published and is available through the USBA Store for \$ 1.00 + The document 50¢ P&H. was generated in a democratic way through a continuation of the rules committee format initiated by John Mauro in The rules have 1985. changed somewhat to make us more compatible with the rules of other nations. Major refinements have been made to the rating system and a tournament director's section has been added for clarification.

. Special thanks must be given to the members of the rules committee who dedicated so much of their personal time to sythesize this document, especially Doug DuFresne who spent many extra hours on the phone and typewriter keeping the committee together. Doug also did the layout, typesetting and help with the printing to keep the It is only costs down. through such personal sacrifice and dedication that the USBA operates on 50 M radius circle. a quality level at a low cost.

Official Boomerang Competition Rules

The following section highlights some of the major changes to the event rules:



*Accuracy Event: 5 throws, no warm-up throw.

*Australian Round: 5 throws, no warm-up throw.

*Consecutive Catch: one handed catches: hand specified, not optional.

*Doubling: range check on first round.

*Endurance: control of marker proximity defined.

*Fast Catch: time limit of 60 sec. for cut-off instead of allowing only one drop; scores for number of catches, if less than 5.

*Juggling: option to restart before 3rd catch.

*MTA Unlimited: 5 throws, no warm up.

*MTA 50: same as MTA Unlimited except throw must be made from bullseye and caught within the

*MTA Combined: both MTA Unlimited and MTA 50 may be run concurrently with scores caught inside the 50 M boundary counting for both MTA events, and scores caught outside the 50 M boundary counting only for MTA Unlimited.

*Position: unchanged.

The following section highlights some of the major changes to the tournament officiating section:

*Liability waivers are mandatory. Tournament directors who do not submit signed waivers with tournament results to USBA President within 32 days will void that tournament's results in the USBA rating system.

*Interference caused by unintentional contact between competitors or between competitors and errant boomerangs is no longer legal ground to qualify for a re-throw. For safety's sake, it is the competitors' responsibility to spread out more in events such as Consecutive Catch.

*Tighter controls on timing and measurement.

*An extra point awarded for placing in first, no place points for no score.

*Separate categories for records and feats.

*Clarification of range challenge, protests, etc.

Spring 1987

The following section applies to the new rating system.

*Ratings will be compiled for all events.

*The USBA overall champion wi⊥1 have accumulated the most points in the primary events: Accuracy, Australian Round, Consecutive Catch, Fast Catch and MTA Unlimited during the competition season.

*The ratings for each event will be based on three factors:

- -Single best tournament score.
- -Arithmetic average of all scores excluding single best score. -Arithmetic average of all place points.



IMPORTANT NUTICE

The USBA administration has recently reorganized to improve service to its member-Several adminship. istrators have changed because of problems that were experienced with the membership service and the record late winter issue of MHR. The problems that surfaced were caused by changes in the personal lives of these administrators, such as job demand and moving on short notice. and limitations to the computer systems owned by these volunteers. This issue of MHR was typeset and pasted together by a small group of Toledo

volunteers, using a Commodore 64 computer. Many thanks to Brenda Miller, Mary Coughtrie, and Scott E. Gilford for their volunteer efforts on such short notice. The following section introduces important link between the new USBA officials: Advertisement Director-Anyone wishing to advertise in MHR should write John Flynn at... RR # 2 Box 209-8 White River Junction, VT. 05001.

Publishing and Art Director- Paul Sprague is those who volunteered a professional journalist their services in the who has volunteered to take on the important function of newsletter art director and publishing coordinator. Paul is the USBA member who always shows up at tournaments with the oversized multibladers. Paul will work directly with Ben Ruhe (Editor) and myself starting with the Summer issue of MHR, expected in early July. Those wishing to provide support to Paul may contact him at: 18 Hartness Dr., Madison, Ct. 06443.

USBA Store Sales Director-Callie Laurent is moving to South Bend, Indiana very soon leaving the USBA Store to Dennis Joyce. The USBA Store address will not change.

USBA Membership Director-The ranks of the USBA membership have grown beyond the capabilities of David Philpott's Commodore 64 data management system. Tom Tuckerman, who is currently serving as USBA Statistician with

his management of the rating system, has volunteered to maintain the USBA membership services. Tom is a prominant member of the famous Cleveland Boomerang School group and an CBS and USBA. Effective immediately, the new USBA membership address is:

USBA Membership c/o Tom Tuckerman 55 Barrett RD # 333 Berea, OH. 44017.

The USBA offers kind words of thanks to past and can no longer We welcome those help. who have volunteered to take their places. It is through such dedication that the USBA can offer quality service at such a great price. Help! The USBA needs a volunteer to maintain the USBA Video Archive System. The Volunteer must be capable of copying and editing both VHS and Beta format tapes. Contact USBA president immediately if you are interested in this position.

. USBA Archives- are currently being transferred to the Smithsonian Archival System.

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USBA VIDEO ARCHIVES- The USBA maintains several hours of choice boomerang related tapes in its files. An "overseas boomerang movement" video presentation has been a popular sale item and remains a bargain at \$30 For information on ppd.

(Continued on page 4)

other USBA video presentations, contact the president, USBA.

. WURLD CUP 1988- The USBA rating system will be used as a tool to select a team to represent USBA in the 1988 World Cup. The selection will be based upon the events and relative ranking of the events to be held in the World Cup. The top three selected for the team will not necessarily be the top 3 in the USBA over-all ranking. The events that will be considered include: Accuracy, Consecutive Catch, Fast Catch, MTA 50, and Australian Round with 2 1/2 times ranking for Australian Round. If the BAA changes the events or relative ranking, then the selection process will change accordingly. A top three placing does not guarantee team status if personal time or finances become limiting issues. 4th, 5th, and 6th places will stand by as possible alternates.

. . . 1987 USBA Slate of Nominees- The USBA will publish a slate of prospective nominees in the summer issue of MHR. If you are interested in serving on the board of directors, contact the president, USBA as soon as possible. The USBA does not need popular or skilled throwers. We are not looking for someone who just wants the vote. We need responsible members who are willing to work hard to continue to provide quality service to the membership.

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MUSINGS By T.W. Smith

A young Corvallis, OR, electronics specialist and poet muses as follows on throwing the boomerang: "At a given moment in time there are an infinite number of ways to successfully throw and return the boomerang; the problem is that there are an infinity raised to the infinite power number of ways to fail. Furthermore, there are only a few ways (perhaps only one--this point can be debated, as in every thing I say here) to return it that deeplu satisy--where the trajectory or flight pattern is most aesthetically pleasing, where the whole event fulfills one's anticipation of exactly how it should go. "Throwing the boomerang can be quickly learned. Each person

develops a style: boomeranging epitomizes the uniqueness of each moment, the uniqueness of each person.

(Continued on Page 16)

Good quote from Jim Earp of San Diego: "I finally broke down and bought a boomerang and learned to throw it. If the wind is slight, I can get an 80 percent return on original investment (which is better than a lot of stocks)."

Murphy's Rules

Beat Aepli and Bruno Bucher put out a quarterly newsletter on behalf of all the boomerang clubs of Switzerland and their "Murphy's Rules for Boomerangers" from a recent issue shows that the Swiss experience with 'rangs is the universal one. Here are the rules:

1. Two boomerangs that are built the same will not fly the same.

2. My friends' boomerangs always fly better than mine unless I throw them.

3. The quality of birch plywood is inversely proportional to the number of defects in the wood.

4. The holes between the layers of the plywood only show themselves after you have carefully drawn the pattern out and have begun to cut.

5. The holes are always located at the weakest point of the boomerang.

6. Boomerangs always land where they can do the most damage. This is known as the rule of selective gravity. Examples--a floater will land in a blooming tulip field;--booms always land in the tree next to the tree that can be easily climbed;--metal boomerangs seek bodies of water.

()()7. The boomeranger knows all of the above pitfalls and selects a field that avoids them. He has a special talent for selecting a color for his boomerang that precisely matches the color of the environment. This is called the "chameleon syndrome." In the summer he throws in a field of flowers that matches the color of his 'rang. In the fall he throws a boom decorated with autumn colors. Against the white background of winter, no boomeranger would think of tossing a black 'rang.

8. All of these factors insure that the thrower will not use the same boomerang for long.

Many Happy Returns

WORLD NEWS

Geoff Kennedy pulled off one of the more spectacular throws in Australian boomerang history during the recent distance event at 92 2 day national championship in Melbourne. a borrowed Rod Junes stick, in a lot of wind. Geoff on his fourth MTA launch, put it up high and hard and away the boomerang flew---out of the playing area, over a railway líne, down several blocks of houses, and, still flying at 200 feet of altitude, out to sea, never to be seen

MANL.

The 1987 National Championship Boomerang Tournament will be held at the Cuyahoga Valley National Recreation Area August 14-16. The tournament will be governed by the 1987 USBA Rules. Individual events

comprising the tournament are: Juggling, Doubling, Accuracy, Australian Round, Consecutive Catch, Maximum Time Aloft, Fast Catch, and Endurance. Team events will include: Round Rang Relay and Position. There will be a special night accuracy competition that will not count toward tournament scores.

The site of the tournament is a dedicated boomerang field in the 80 acre Howe Farm Special Events Site in the National Recreation Area. southeast of Cleveland. The Cleveland Boomerang School and the National Park Service will mail a formal invitation, appli-

again. Six minutes until fine athlete, followed along to the bitter end. In other highlights, Rob Croll took Accuracy, Geoff Kennedy won the meters, and leftie Paul Using Bryden Aussie Round and Bunny Read got Fast-Catch at 33.61 seconds after Bruce Carter's fast round, with an under 24 second clocking looming, came to grief as his last return landed a foot o'r two in front of him. Confirming the opinion that many American throwers have of him as the foremost

> cation, and detailed map in the near future. If you do not receive your invitation by June 15, 1987, or have additional questions, please direct them to:

Gayle Hazlewood 15610 Vaughn Road Brecksville, OH 44141 (216) 650--4636 -0r-Dave Boehm P.O. Box 17385 Euclid, OH 44117 (216) 442--6024

As in past years there will be absolutely no selling of boomerangs on park property. All selling and USBA business will be conducted at the Hudson Holiday Inn, where a block of rooms has also been set aside for competitors wishing to stay there (All competitors are responsible for their own overnight accommodations and expenses.). Rooms will be available Thursday, Aug. 13 through Sunday, Aug. 16. The hotel is serviced by the

thrower down under, Rob disappearance! Geoff, a Croll took first place in Boomerang Association of Australia individual ratings for 1986. He had firsts in Accuracy. Fast-Catch, and Australian Round and a second in MTA. Geoff Kennedy was overall runner-up with a first in MTA, two seconds and a fourth. Ratings were calculated on the basis of each player's five best placings in each event during the year. Seven years after selling his beautiful boomerang farm in the mountains back of the (Continued on page 6)

> Cleveland Hopkins Limo Service at \$11.00 per person one way. There will be free transportation to and from the competition site.

If you stay at the Hudson Holiday Inn you will receive a complete package of information including: contacts, deadlines, facilities, and directions. Room rates are as follow: Single @ \$62.00, Double @ \$69.00, Triple @ \$74.00, Quad @ \$80.00...plus state and local taxes (Figure an additional \$5.00 to \$7.00 a night.). For reservations, call: Mary G. Tricaso at (216) 653--9191. At this time there is no camping within the Cuyahoga Valley National Recreation Area that is administered by the Park Service. There are numerous private campgrounds in the immediate area. Be sure to make lodging arrangements as

soon as possible.

WORLD NEWS

Queensland Gold Coast, Dr. Lorin Hawes, the expatriate American 'rang making wizard, has opened thusiasts Kaspar Kramis a self-styled "tourist trap and boomerang factory" on Hope Island, near his Runaway Bay home. It has 2 throwing fields, a screened-in protected verandah for observers, and sales shop. A kangaroo pen is probable.



Now there's a CBA--- Canadian Boomerang in technology and abil-Association, organized by ity. Jim (Boomerang) Bradley. Bradley has been making and throwing boomerangs enthusiastically for four do things with style and years, after dreaming up a boomerang workshop as an educational project while a student at Queen's University in Kingston. Help in getting the CBA rolling is solicited by Bradley. He asks for written material such as newsletters, videocassettes, boomerangs for educational display purposes, and (primarily) ideas. He is planning to his head. Spray flew. issue a newsletter, hold workshops and tournaments, and create exhibitions at the Toronto Science Center and else-Address him at where. Box 9331, Stoney Creek, Ontario, Canada´ L**8**G4S1 It was "Hands

Across the Sea" as American John Flynn, world record holder in

Fast-Catch and Endurance, and new bride Kirk, honeymooning in Davos, Switzerland, met with Swiss boomerang enand Dr. Philippe Haake. The Swiss pair drove eight hours to effect the "Despite rendezvous. knee-deep snow and swirling winds," said John, "Kaspar and I were able to get off a few good throws, while Kirk and Philippe took pictures and laughed at the absurdity." Adds John: "Judging from the skills Kaspar exhibited. (He's done Fast-Catch in 21 seconds in practice.) he and some other Europeans are on a par with the Americans and Aussies Upcoming international matches should be very interesting."

Trust the French to originality. In a Gallic twist on the William Tell apple trick, Jacques Sotty of Paris last New Year's Eve stood in front of the Eiffel Tower, launched a heavy 'rang as the clock counted down. and as the boomerang winged home in the New Year, permitted it to slice the neck (precut presumably) of a bottle of champagne mounted on Jacques then sipped a glass of bubbly in triumph. All this was duly photographed in color, for a subsequent magazine spread.

Fast Catch

back that fast. What if I undercut it?"

Undercutting, or hollowing-out, produced a different effect than the "kiting" Eric referred to. Drag was decreased by reducing airfoil thickness so the 'rang spun faster and returned sooner. A slightly positive angle of attack gave the wings the look of a turbine airfoil, and weights were added to achieve 20

plus meters.

The wingspan was reduced from 17 1/4" to 15" in 1984 to improve catchability and lessen the awkwardness of the throw, but the airfoils and wingtips were not changed. Dihedral is neutral. This concept has gradually made its way into circulation and is being used successfullu bu a number of throwers.

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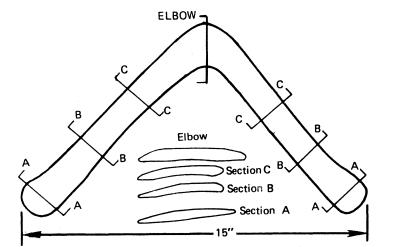
Theory

The traditional hubrid airfoil (turbine) generates a tremendous amount of lift, the key to a gold Fast-Catch

HANDCRAFTED-ORIGINAL BOOMERANGS FOR COLLECTORS-BEGINNERS MODERATE THROWERS FREE COLOR BROCHURE

WOOD STEVE 9201 CENTRAL AVE. NW ALBQ. NM 87105

Spring 1987



John Flynn's Fast-Catch boomerang, with airfoils. This is a right-hander. To achieve a smooth, quick turnaround, Flynn suggests catching by holding the

'rang. In addition to normal lift due to the pressure differential on the wings, there is displacement lift from the turbine shape. Air is redirected away from the underside, pushing the boomerang in the opposite direction.

This "double-lift" combined with a near vertical throw results in a 'rang that flies in a tight circle. There is drag created by the displacement, but I consider it to work in the thrower's favor because catching is easier when the 'rang is not spinning furiously.

The above figure shows the important cross-section of my top Fast-Catch boomerang. There is a small lead wafer taped to the lift arm at section C-C to guarantee 20 plus meters. The differences from the elbow to the tops are subtle because the goal is to displace as much air as possible while minimizing drag. It is a balancing act, because as you lose spin, you lose time,

arms out and drawing the boomerang into the chest. Then turn to the left while finding the grip, and stride into the next throw.

too much spin, though, and you lose control, especially in a breeze. For wind, I tend to shape sections B-B and C-C more like section A-A. Drag will become your ally in the wind because the ability to control your 'rang gives you a better chance to get five catches. As a rule for Fast-Catch, use more weight and w increase the angle of attack as it gets windier.

Strategy

Throw in whatever direction yields the best results (I like to throw 90-120 degrees off the wind), and be sure to locate the range monitors so they will see the 'rang go beyond the 20-meter line. Since the first throw usually sets the tempo for the rest of the round, take a few deep breaths to relax before starting, but do not be tentative when you let the first one go. During the flight, there is enough time to move, locate the throwing cirle, and see or hear the monitors signaling. Maintain a relaxed breathing pattern through these intervals and get ready to catch. Extend your arms and bring the boomerang into your chest.

The accuracy of your throws will determine how fast you can make the transition from catch to throw, so know where you want to throw when you get in the circle and be flexible enough to make adjustments in mid-round. Do everything you can to make accurate throws and efficient transitions.

If weather conditions are favorable, you can go for speed in each

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Many Happy Returns

Spring 1987

Fast Catch

round. Otherwise, it is better to concentrate on getting five catches the first round, then put the emphasis on speed in the second (In Endurance, I use the same boomerang I use for Fast-Catch and relaxed breathing is even more important in maintaining a groove---although that's easier said than done!).

There are a lot of Fast-Catch ideas out there: 3-bladers, V's, 100's, etc., but this is what has worked for me. Don't take this information as the last word on Fast-Catch, though, use it as input towards designing your own sticks. Innovation and experimentation will inevitably result in superior boomerangs, regardless of the event.

See you out there!

A Vote For Tribladers

John Koehler of Gaithersburg, MD, thinks tribladers are the way to go in the Fast-Catch event. He speaks with some authority, having done seven straight rounds under 25 seconds using, what else, but a three-blader. Koehler thinks the symmetrical 'rang gets more consistent flights, is stronger since it isn't typically undercut like many top Fast-Catch two-bladers, is much easier to catch because of the big central elbow, and constitutes no worry about choosing between lift arm or dingle arm for the

launch since the thrower grabs any one of the three duplicate wingtips and lets fly.

Tribladers are particularly good for the average thrower, Koehler feels, and he expects they'll proliferate this season. "I predict that the triblader will do for the Fast-Catch event what Ted Bailey's MTA models did for the Maximum Time Aloft competition: make good perfomances possible for many more people. When you think about it, that's what the sport of boomeranging is all about."

Troubleshooting

So you make your own boomerangs, and you're pretty good. But sometimes one just won't fly correctly despite your best efforts to fix the 'rang or modify your throw. What will you do? In the following compendium, experts from three continents recommend ways to deal with seven common flight faults.

This "round robin" was begun by John Bigney of Australia. Contributors are Tony Slater of England and Ted Bailey, Eric Darnell, Chet Snouffer, and Doug DuFresne of the U.S.

Fault 1: Makes too wide a circuit.

Remedy: Increase the angle of attack on the leading arm with a more aggressive undercut. Or add wash-in. Check throwing angle and experiment by throwing more off the wind (to the right, if a right-hander).

Fault 2: Spirals in too much and lands in front of thrower. Remedy: Throw with more layover (less vertically) and more into the wind. Add a little dihedral on the wings, or add washout. Is the boomerang simply too heavy?

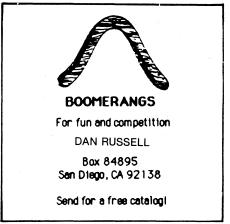
Fault 3: Loses altitude on return and crashes to the ground.

Remedy: Check your throwing technique: are you giving the boomerang enough spin? --- try cocking it back in the hand and gripping it very firmly at release. Is the 'rang too heavy? If so, it may need better airfoils, or a less blunt leading edge. Is 'rang warped downward with anhedral? If so, flatten. Throw more off the wind.

Fault 4: Soars too high instead of turning.

Remedy: Possibly thrown with too much layover, or has too much angle of attack (aggressive undercut). May have too much dihedral; if so, heat wings and bend down flat.

Fault 5: Runs out (Continued on page 9)



Troubleshooting

of spin.

Remedy: Too much drag may be caused by poor airfoils or blunt leading edges. Carve the leading edges to a more gradual slope. Sand trailing edge sharper. Try adding weights to wingtips.

Fault 6: Goes out too far and dies on return.

Remedy: May have negative warp in one or both arms. If so, heat and bend up. Or check for minimal trailing edges and bring the edge further across the wing chord. Throw when windier. Is boomerang simply too heavy?

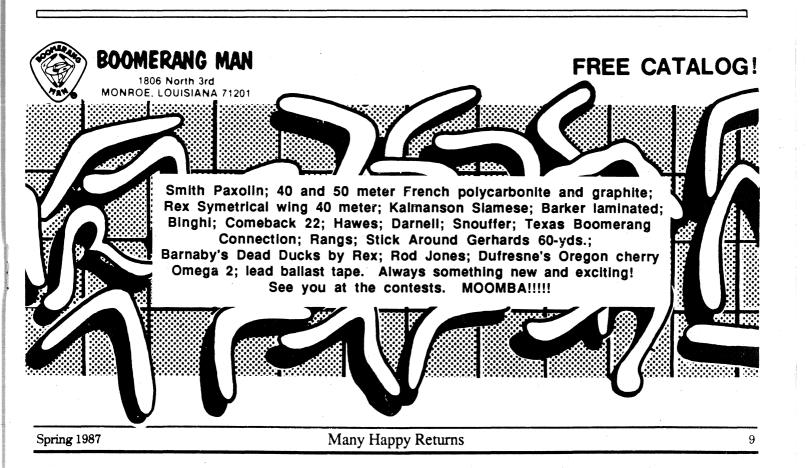
Fault 7: Boomerang flies an "S" path instead of an "O" path. Remedy: Lift is imbalanced, generally with too much on the leading arm. Decrease angle of attack on leading arm or undercut trailing arm to balance with leading arm. Check for dihedral imbalance. Flatten arms by heating and bending. Add washout on trailing arm. Or, the elbow angle may be too great. Corrections can be (

made by carving ---pretty much unreversible---and tuning---reversible, in theory. Take your pick of methods.

Snouffer makes the point that boomerang makers should pretty much stick to proven shapes. Then try your boomerange under different conditions. "Some of my best boomerangs were supposed to do something else when I made them but ended up being better at something I hadn't considered. My best wind 'rang is a failed fast-catcher as is my best consecutive catch 'rang."



Finally, Chet commments: "I firmly believe each thrower should build his own boomerangs because therein lies the magic. Your boomerangs and your throwing style merge and become one over time."



By Leni Barker

What's That Rash?

Throwing boomerangs is a safe sport but making them can be hazardous to your health.

Several common and manu exotic woods can cause allergic reactions. Ted Bailey and Rusty Harding had adverse reactions to zebra wood and I had one to coco bolo. Symptoms include poison oak-type rashes, itching, hives, runny nose, redness and irritation of the eyes. and difficulty in breathing. Woods known to cause reactions in some people inlude zebra, coco bolo, aromatic red cedar, African mahogany, and vermilion. You don't get the reaction just handling the wood, it develops after exposure to the resins in the sawdust. Some persons never have a reaction, others become sensitive after prolonged exposure. In these cases the reaction can be increasingly severe with multiple . exposures.

Steps can be taken to avoid illness. Wearing a dust mask during sanding and sawing is important because inhaling the dust from these woods causes the most severe reactions. Imagine breathing smoke from a burning poison oak bush! Long sleeves and pants are helpful

in keeping sawdust off your skin. Washing your hands with soap and water after working removes the resin which causes the reaction.

Basically the same precautions should be taken as when working with any toxic substance, and if you have a reaction to any variety of wood, stop working with it immediately, forever. Otherwise, a serious health problem may develop.

Be aware that various glues, varnishes, lacquers and stains have a dangerous potential for boomerang makers.

I want to urge everyone to work safely with wood. Wear ear, eye, and respiratory protection when working with power tools. Use adequate ventilation when painting and varnishing. Use a mask when spraying. And watch your fingers around saws, routers and sanders. Play safe, build 'em safe, and have more fun. Live to boom!

Boomeranging, Japanese-Style

In a recent newsletter, the Japanese Boomerang Society reveals it has studied Western competitions and decided to give them an Oriental twist. Thus Aussie Round becomes the Kung-Fu Round---the winner is the first person to chop 10 'rangs in half with his hand on their return.



Consecutive Catch (widely known as "Suicide") is renamed Hari-Kari. Since most beginning throwers spend time in the weeds hunting for lost 'rangs, the society prescribes that boomerangs for them should be painted with white stripes: as proficiency increases and trips to the bushes occur less frequently, the thrower's boomerangs progress through the ranks with yellow stripes, then orange, green, blue, brown, and finally black. Lastly, boomerang tournaments there end not with beer busts, but with tea ceremonies. What else?

Sunday June 1987 Tournament Dates to Remember U.S.B.A. USBA TOURNAMENT INFO UPCOMING EVENTS

12TH Annual Boomerang Tournament: Portland, Oregon Rose Festival; Sunday, June 14, 1987. Contact: Marjorie Gerrish (503) 292 - 5697.

International Team Cup I: University of Mass., Amherst; June 21, 1987; Open Individuals: June 22, 1987. Team Cup Test I Contact: Larry Ruhf (413) 323 - 4340.

International Team Cup II:Northampton Comm College Portland, Oregon; Bethlehem, PA. June 24, 1987: Open Individuals June 25, 1987: Team Cup Test II. Contact: Peter Ruhf (215) 967 - 3683.

International Team Cup III: Potomac Polo Field, Gaithersburg, MD. June 26, 1987: Open Individuals June 27, 1987: Team Cup Test III. Contact: John Koenler (301) 340 - 1538.

Third Annual California Regional Championships: Uakland, Calif. Saturday, August 1, 1987 1 - 8 P.M. Contact: Steve Fargon/ Michael Girvin (415) 428 - 1813.

Spring 1987



Free Throwers' 8TH Annual Tournament: Delaware, OH Saturday; August 8, 1987 Contact: Chet Snouffer (614) 363 - 8332.

USBA Nationals: Cleveland Cuyahoga Valley National Recreation Area: August 14, 15, 16, 1987; Contact: David Boehm (216) 442 - 6024.

Summer's Last Fling: September 20, 1987; Contact: Doug DuFresne; (503) 292 - 4316.

For an up-to-date review of upcoming tournaments, call the USBA Tournament Notification Hotline at (619) 298 - 4283 Day or Night 24 Hrs a day.

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Send the tournament notification director several self addressed stamped post cards. Include which regions you are interested in. Send to: Dan Russell 3522 Union St., San Diego, CA. 92103.

Organizer of some dozen boomerang tournaments, Michael Gervin of Evergreen State College in Olympia, WA, gives the following advice to those planning to run their own "boomtests" (as he calls them) 1. Have newcomers to the sport and the adepts throw together. either mixing them up in each event or alternating events with one for novices, one for experts, etc. ---"this eases the stress on winning and promotes a community atmosphere;" 2. run team events, mixing experienced throwers with less experienced ones ---" at my contests, the team events produce the most enthusiasm and biggest smiles;" 3. give everyone a prize ---"It is very easy to print awards and hand them out to even the 40th place, and prizes such as boomerangs and merchandise are readily acquired:" 4. plan ahead so the various officials know their roles, equipment such as lime, signup sheets, the schedule of events and other necessaries are on hand, and rules can be hashed out and explained to players before throwing starts. "My experience with organizing tournaments," concludes Gervin, "is that if everyone competes together and has a good time, then they will continue throwing boomerangs for years. Promotion of the sport will be self-perpetuated by the fun had by all."

Many Happy Returns

Weighting A 'Rang With Lead

Following is easy-to-follow advice on placing lead weights in boomerang wings from a Portland, OR, enthusiast:

By Tom Peterson

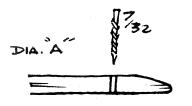
I've been leading for years and use a technique that only takes five or so minutes to lead a boomerang at both tips.

Leading a boom is as easy as 1, 2, 3, 4, 5. After you try this method you'll never go back to other methods.

First you'll need the necessary tools: A hand-held drill or preferably a drill press, a hammer and an anvil or a thick, smooth steel surface for tapping. Accessories include a 7/32" drill bit, small stone cone and 3/16" sinker lead (used for fishing).

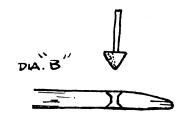
Step 1 Dia. "A"

Drill the boom tips, holding the drill as vertically as possible. Hold the boom down tight and let the bit do the work so the boom won't chip around the perimeter of the hole.



Step 2 Dia. "B"

Use a small stone cone and hone the 7/32" hole in one third of the way on both sides.



Step 3 Dia. "C"

Use a sharp knife and cut the end of the sinker lead to obtain your first flat side. Now measure the lead for the next cut and make it 1/4" maximum over the thickness of the wood. Position the 3/16" lead in the semi-loose 7/32" hole with the extra lead length protruding equally on both sides.



U OVER THE THICKNESS OF WOOD.

Step 4 Dia. "D"

Now you're ready to tap the lead into place. You'll need a flat steel surface to act as a sort of counter hammer for the bottom side.

You'll find that the lead rests on the steel surface and the boom is slightly above the surface for the first taps. After the first couple of taps the lead will expand into the spool-shaped hole. At this point you should flip it over and over as you tap to inspect your work. When you come to the final taps where the hammer meets the wood, tap ever so lightly to avoid any splitting.

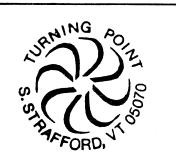


Step 5

If you have any excess lead protruding over the hole, use a flat file to bring the lead flush to the wing's surface.

Alternative

Cut the lead a little shorter than I recommend and after tapping fill the top of the holes with wood putty, then sand to a smooth finish.



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Around and About

Boomerang enthusiast David Silver and wife Suzanna Nemeth have an interesting lifestyle. Both dentists, they have set up a joint practice beside a lake near Morris, CT, where their patients can watch boats sailing and birds swooping. In addition to 'rangs, Silver is something of an expert on astronomy, bonsai tree growing, and the bagpipes. Last winter, while on ice skates, he launched an MTA boomerang in a heavy wind, skated furiously downwind, and made the catch an estimated 200 yards from the launch point.

Craftsmen making exceptionally beautiful boomerangs are alerted to a forthcoming exhibition of boomerangs as art at the Arts Council Gallery in Swainsboro, GA, being organized by Neil Kalmonson and others. Kalmonson is an assistant professor of art at Emanuel Junior College in Swainsboro and a 'rang enthusiast. He has exhibited his own boomerands in a number of art shows. Kalmonson envisions the show he plans going on a national tour. If interested, send Kalmonson slides of your creations in care of his college.

■ If you've run out of mismated socks to store your prize boomerangs against scratching and other damage and if you have access to medical supplies or have a good connection with a member of the medical fraternity, consider acquiring a roll of the stocking material used to wrap human limbs before casts are applied. The stuff is cheap, flexible, strong, and can be snipped to any desired length.

■■ NBC'S Highly popular "Today" show gave boomeranging a boost recently with a five-minute feature on throwing in Australia and the U.S. Duncan MacLennan in Sydney, with his salty Aussie talk, and the Washington, D.C., contingent performing on the National Mall were the stars of the segment.

■■ Yet another plastic boomerang has hit the market, this one called the Chevega because it blends chevron and omega shapes. The manufacturer is Larry Parks of Detroit. Easy to throw, easy to catch and good in the wind, the 'rang is made of trusty polypropylene and goes out some 40 meters. Parks is selling the boomerang in a small way now, but hopes to expand.

■ Ken Hallet of Rochester, N.Y., is another newcomer in the boomerang-making field. One of his creations is the "hangerang", a coat-hanger shaped boomerang designed for what Hallet calls "closet boomerangers." A lab worker by day, Hallet labors in his home workshop at wight making boomerangs, where he becomes chairman of the board and chief designer of Apogee Boomerangs and Other Flying Stuff, as he has named his company.

For the record: The word "diameter" should have been "radius" in the second paragraph of Ted Bailey's fine article "MTA Demystified" in the Fall 1986 issue of Many Happy Returns. Credit Ray Rieser with the catch.

ME Evans Wuu of Orlando, FL, warns fellow boomerangers to keep their sticks out of tall trees. Climbing one himself to retrieve a stuck 'rang, Wuu had a branch crack and he fell to the ground. breaking a collarbone. "I was bouncing off the branches like a ping pong ball," he says. Wuu is back throwing. but more careful with his boomerang launches now.

"All these matters unite in a good throw: patience, perceptiveness intuition, calculation, receptivity, projectivity throwing form, and qualities that are as yet ineffable. It is always important to be aware of the angle thrown with respect to the wind--no matter how slight the wind effect appears to be. Be aware

CHINESE BOOMERANG WIZARD

Who's the best boomerang thrower and catcher in the world today? The answer appears to be Dai Shucheng, a 51-year-old Chinese acrobat.

Shucheng surfaced from an unexpected quarter---the world of Juggling. Guest artist at the International Jugglers' Convention in San Jose last summer, Shucheng gave an astounding indoor performance. The leader of the 90-man Heilongjian acrobatic troupe when back in his home city of Ha Er Bin, Shucheng first got the air conditioner turned off so there would be no errant air currents to battle. Then gaudily dressed, always smiling, and to apt musical accompaniment, he pulled off the following feats using two-armed, four-armed and six-armed boomerangs (the multibladers equipped with spikes sticking downward from the elbow so they could be caught spinning):

right-handed and the other leftie and caught both on return; threw simultaneously on low, level, and high trajectories and caught all three; threw four simultaneously but with different forces and when the first returned he caught and quickly relaunched it, as he did in turn with the



Having caught boomerangs spinning in his hands and on top of his head, Chinese acrobat Dai Chucheng prepares to catch a fourth one on the tip of his foot. Notice the slightly strained smile.

second, third and fourth 'rangs, thus creating a moving "vase"---his word---in the air; threw six in a row and caught all of them on return; threw four in succession and did a standing somersault before catching the boomerangs as they came back to him. us, but we certainly

Ready for more? Threw one boomerang Shucheng then tossed a boomerang that knocked a flower from the mouth of an assistant before being caught by himself and with a two-armed stick knocked a flower from his own head and caught the boomerang, Launching one boomerang that spewed out two others in the air, he caught the trio.

His 10-minute show ended with a pair of flash routines. First, he threw two 'rangs from either hand in succession and caught the first two spinning in either hand, the third spinning on top of his cap, and the fourth spinning on the toe. Finally, he had "Baby Wave Its Hands." For this, he clenched a long tube in his teeth on the end of which perched a doll; Shucheng launched three pinwheel six-bladers and caught two spinning in either hand and the third spinning on the doll's head, after which, by means of a puff of breath, he made the doll clap its hands with pleasure. As did the audience. "The audience was appreciative but not wildly enthusiastic of the act," reports Bill Giduz, of Davidson College, IJA president. "We jugglers don't throw boomerangs, so we didn't really realize how difficult Shucheng's performance was. He made it look rather easy. The act was a bit esoteric for did appreciate its beauty."

Giduz says Shucheng carried his multibladers taken down in a case and that he assembled them by wrapping them with cord at the elbows, not knotting the string but rather twisting it. The 'rangs were of pine, and linden wood, and noticeably delicate.

(Continued on page 15)

Many Happy Returns

CHINESE WIZARD

Blades were 14 inches long or so, except in the case of some larger six bladers.

Throws were made well out over the audience, and circled in back of him. "Shucheng wouldn't let anyone throw his boomerangs," says Giduz. "I don't think he let anyone even touch them."

Shucheng was born into a family of acrobats and performed as a professional juggler in Shanghai as early as 1944. Before specializing in boomerang throwing, he perfected the art of swinging jars without spilling water from them. Shucheng speaks only Mandarin and communicated with the jugglers at San Jose through an interpreter. He came to the U.S. at the behest of the Chinese government which has promoted world-wide appearances at the festivals by its major artists.

Giduz' lasting impression of Shucheng in action is a charming one: "He hopped merrily across the stage, always smiling, and he gave the impression of a happy man playing with trained birds."

Happy Mind! Healthy Body! By Dai Shucheng

Editor's Note:

In a scholarly paper prepared for the International Jugglers' Convetion, Chinese boomerang thrower Dai Shucheng discussed various aspects of the device he refers to as the "fei-pan"---which might be translated to "flying stick." By any resonable definition, this object is what is known in the Western world as the returning boomerang. In both its two and four-bladed manifestations, the "fei-pan" has some Australian Aboriginal analogues although six-bladers (pinwheels) may not have been known Down Under. If Dai Shucheng's claim of a Mongolian origin for the boomerang is correct, then the Austrialian claim of exlusivity in invention is not valid. It might be noted in this connection that John Caldarazzo of Colorado State University, who is something of a boomerang expert and did a teaching stint in China, issues the following caution: "No, I knew nothing about its Mongolian origin when I was in China. but I did learn a lot about a Chinese propensity to claim everything ever invented as their own. Oh well, if we had 3,000 years of continuous culture I guess we'd claim a lot too." Following, then, is an edited version of the Shucheng paper as it relates to the Asian origin of the returning boomerang and the philosphy behind its use in performances:

As early as 1300 A.D., Mongolians in northern China used a device called the "bulu" ("hurling" in Mongolian) as a hunting and fighting weapon and an instrument for sport. It was actually the "flying stick" as we call it today and it was made in the form of a sickle. There were two kinds, one for distance throwing, the "haimule" ("elm" in Mongolian), and one for aiming (returning) called "tulaga" ("head"). The "bulu" remains popular in Inner Mongolia todau and is demonstrated at fairs. In southern China, the "fei-pan" or "flying stick" is called the "airplane stick" by acrobats who use it. As a device for performances, the "flying stick" came into use in this area during the Song dynasty 1,000 years ago. In his book Martial Arts Stories written at this time, Zhou Mi cited more than 50 types of acrobatic performances in existence then, including one using "flying sticks" bu acrobat Lu Yanzi and partner.

Nowadays, Chinese jugglers have adapted ancient acrobatic routines for the stage after analysis of the mechanical principles involved; thus with boomerangs the throw, flight, and fall were

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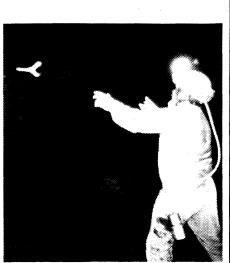


photo by Tom Pollock.

IT HAD TO HAPPEN -

Enthusiasts have thrown boomerangs off mountain tops and around monuments, but Charles Wagg of Route 1, Cream Ridge, NJ claims a first . . . cave throwing. Here he gets set to catch a Nerf 3-blader (an ultra soft boomerang so as not to damage cave formations) in Smedicar's Cave in West Virginia, Wagg asks: "Can I be known as the father of speleo-boomeranging? . . .

MUSINGS

of how the wind is constantly changing--no matter how slight the change. Be aware of the velocity, the spin, the angle of the boomerang plane with respect to the Earch's plane.

"Each throw to me requires a unique comprehension of each of these facets. And what is more, you can realize all this in one instant--without so much elaboration, without ever-so-much a care in the world!"

Happy Mind!

studied and adapted for use.

Throwing boomerangs improves man's thinking. his concentration, observation, memory, understanding, and imagination. It helps develop one's joints, ligaments and muscles. particularly in the upper limbs. Moreover, it improves dexteritu. judgment, strength, and ability to adjust to changing conditions. Boomerang throwers must be calm, confident, quick-witted, and strong-willed. They experience a happy mind, an optimistic attitude, and healthy body.

Boomerang throwing is a major form of expression possessing its own particular artistry. To make it yet more wonderful, new levels of skill should be sought. Routines should be yet ever more original, complicated, novel, precise, and beautiful. Fresh ideas and further creativity are needed, toward the end of perfect and harmonious artistic form. Thus will people's curiosity, interest, and enthusiasm be raised.

Addendum: Professor Peter Musgrove of Reading University, writing in Hemisphere Magazine in 1975, mentioned in passing the possibility of the Asian origin of the returning boomerang with this brief. ambiguous paragraph: "In central and eastern Asia, there is no certain evidence of which I am aware for any weapons resembling the boomerang. The only hint that the boomerand may have been used is contained in some Chinese literature dating from about A.D. 300. It may - or may not - be relevant that the Chinese helicopter top, which dates back many centuries in China

and probably inspired nineteenth-century European model helicopter designs, closely resembles the cross boomerang."

Retailer's take Notice

The USBA has a new service. Retailers mail a quantity of their catalogs to USBA, Box 182, Delaware, OH 43015. New members and other interested parties request a packet containing a collection of catalogs from the various retail outlets. The cost to the retail outlet is only the cost of the catalogs. The cost to domestic members is only \$2.00 to cover shipping and envelope cost. The retailer has the advantage over other retailers who do not supply catalogs. The inquiring member can choose from a variety of retailers for cost/quality comparisons. The demand for this service has been high, but no retail catalogs have been sent in yet. Don't miss out. Mail your catalogs to USBA today!

Many Happy Returns

Archive Given to Smithsonian

For preservation and to make it available to the public for years to come, Ben Ruhe's 18-year collection of boomerang memorabilia--books, scholarly articles, letters, patents, newsletters, planforms, magazine and newspaper articles, instruction sheets, films, photos, videocassettes, visual art objects such as posters, even boomerang T-shirts--has been donated to the Smithsonian's National Air and Space Museum. The gift totaled more than 20 archival file boxes.

"It's apparent you've assembled a virtual anthology of research materials on the subject," Smithsonian archivist Harry Heiss wrote Ruhe.

"We are particularly impressed with the variety of resources, from correspondence to dissertations to cartoons. This is a subject area in which we are extremely lacking, and acquiring your collection is for us something of a coup. We are delighted to be receiving it."

The collection has gone to the museum's giant Silver Hill facility in suburban Washington for organization. It will be made available to the public, by appointment, in due course.

He chose the

Smithsonian for the gift because of its worldwide prestige and excellent location for public access. He had formerly worked for the institution, where he organized the now famous Smithsonian boomerang workshops and tournaments, and this was a key factor in the decision.

Highlights of the archive include 28 books exclusively about boomerangs, in a variety of languages; a six inch stack of scholarly articles, some never published; films of Australian Aboriginals making and throwing boomerangs and of modern-day throwers in action; and correspondence from such as Martha Mitchell (a left-hander) in which she seems to allude to the looming Watergate crisis, Dan Rather, writers Gary Snyder, Larry McMurtry and Leo Rosten, and the director of scheduling for an American president whose secretary in a replu inadvertently refers to the "United States Bomberang Team."

Before the donation, Ruhe made available to the USBA some of his best films for copying and the association plans to include most of them on a fund raising video cassette to be issued this year.

Ruhe will continue to add to the

Additionally, archivist Heiss proposes that the collection be made the nucleus of a broad holding on boomerangs, embracing USBA records, for instance. Correspondence, corporate records, reports, financial records, minutes, etc., have been solicited " I from the USBA. understand the USBA has had a somewhat informal organizational history, wrote Heiss, "and suggest that establishing a formal depository agreement might help to instill a sense of continuity within the organization." Ted Bailey as USBA president has polled officers of the organization and received a favorable response to the proposal. Details remain to be worked out.

Smithsonian archives.

Scholarly Book

By Ray Rieser

Dr. Hanns Peter of the Museum fur Volkerkunde in Vienna has published his long awaited book Wesen und Bedeutung des=Bumerangs (The Essence and Significance of Boomerangs). This 290-page work is the culmination of a two-year study funded by the Institute of Aboriginal Studies, Canberra, in which he examined more than

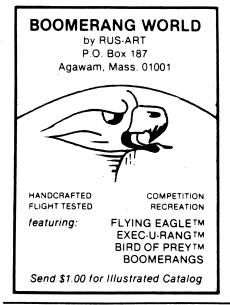
(Continued on page 18)

(Continued from page 17)

7,000 boomerangs (the great majority killer sticks) contained in the collections of the major Australian museums.

Dr. Peter has classified Aboriginal boomerangs into 16 standard shapes, and in his book presents maps showing the regional distribution and relative rarity of each. He also has provided drawings to aid in identifying the place of origin of a boomerang based on incised or painted surface decorations.

The book contains the most complete bibliography of literature on the boomerang published to date. With the cooperation of famed Australian anthropologist Professor Norman Tinsdale, Dr. Peter also presents more than 30 pages (in English) of Aboriginal terms related to the boomerang. In addition the book contains chapters on boomerangs



found outside of Australia, the history of the boomerang, its appearance in early Aboriginal artwork, and an extensive collection of Aboriginal myths and legends relating to the boomerang.

Although the book is written in German, there are a substantial number of passages in English. It is well illustrated and much of the data is contained in tables so that with a little help from a German-English dictionary one can quickly understand what is being presented.

This work is a milestone in the studu of the boomerang. It is the anthropological equivalent of the aerodynamic studies performed by Dr. Felix Hess. It is a must for the collector of antique Aboriginal boomerangs and for anthropologists both amateur and professional, who are interested in both boomerangs and the culture which produced them.

To obtain a copy of the volume, address the publisher: Wilhelm Braumuller, Universitats-Verlags buch handlung, Gmbh., A-1092 Wien, Austria.

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Many Happy Returns



The USBA's fund-raising store is back in full operation, under the stewardship of Dennis Joyce (P.O. Box 2996, Newport News, VA 23602). Some two dozen items are available, from which Dennishas chosen the following highlights:

USBA sew-on patches, \$3.50 ppd.

A beginner's packet made up of a USBA membership, with subscription to this quarterly newsletter included; an easy to throw Steve Glover "Rippa" boomerang from Queensland, Australia, with instructions; the 96-page book *Boomerang* by Ben Ruhe; USBA competition rules; and a selection of interesting literature. A great gift idea! \$22.00 ppd.

A fascinating collection of selected U.S. boomerang patents from 1890 through 1942. Many interesting ideas here on both boomerangs and boomerang launchers. \$11.00 ppd.

USBA competition rules. \$1.50 ppd.

Also available are other books, back issues of this newsletter, scholarly articles, mylar stickers, and USBA T-shirts. Write Dennis Joyce for list.

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Annual dues are \$10; \$10 to renew. Foreign memberships are \$20 and this includes airmail delivery of the newsletter. Address the USBA at c/o Tom Tuckerman, 55 Barrett Rd., #333, Berea, OH 44017. Editorial submissions are welcomed by the editor, Ben Ruhe, and should be sent to him at 1882 Columbia Road N.W., Washington, D.C. 20009. Black and white photographs and art work such as cartoons are especially solicited. Material is returnable.

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