

Many Happy Returns

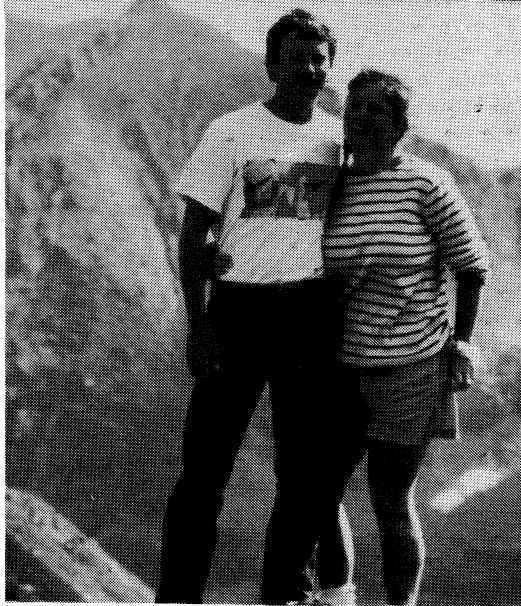
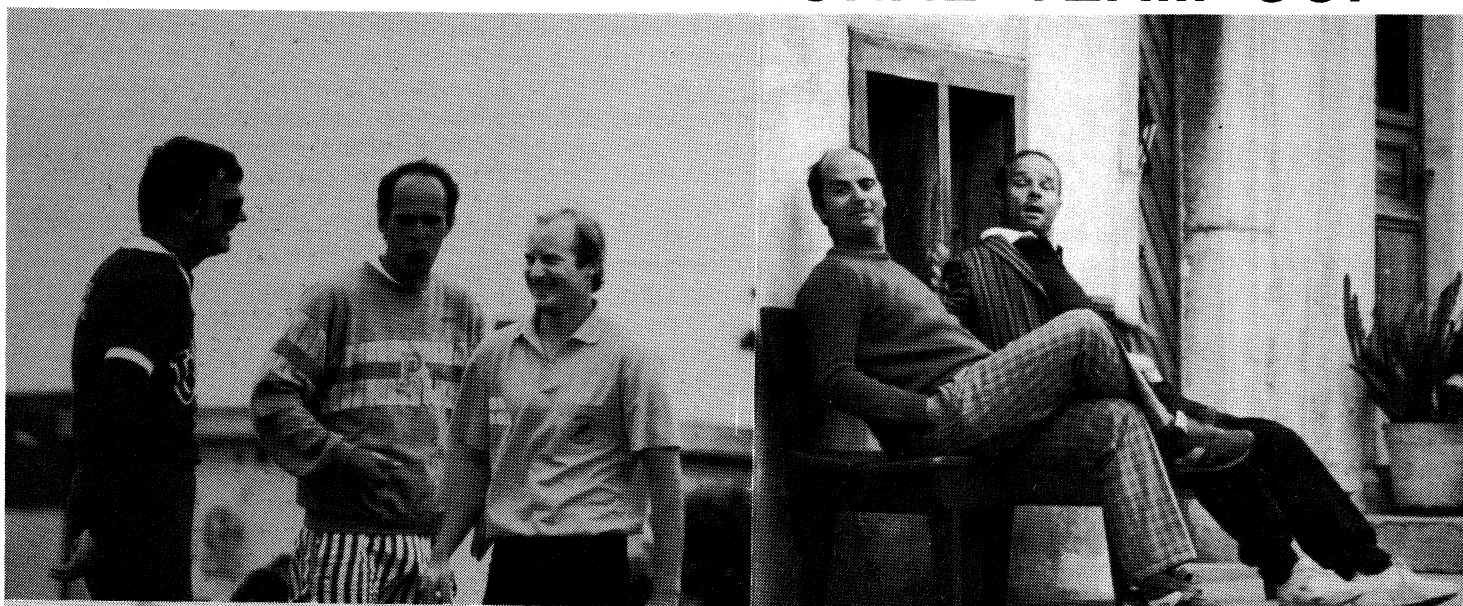
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Spring 1989

THE 1988 INTERNATIONAL TEAM CUP



MORE THAN JUST A COMPETITION

Spring 1989

Many Happy Returns



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1989 TOURNAMENT SEASON - U.S.A.

It's time to make plans for the 1989 competition season. The listing below is the tentative schedule for the year. The USBA has a **TOURNAMENT HOT-LINE** that can be called 24 hours a day: (619)-298-4283

April 29 : Swainsboro, Ga.
John Derden; 9 Cole Grove Dr.
Swainsboro, Ga. 30401
(912)-237-7207

May 20 : Hampton Roads, Va.
Dennis Joyce; 44 Lucinda Ct.
Hampton, Va. 23666
(804)-838-4790

May 14 : Olympia, Wa.
Michael Girvin; 4304 N. Ashland #2W
Chicago, Il. 60613 (312)-528-4106
or Paul Kimble at: (206)-943-2563

June 10 - 18 : Gaithersburg, Md
International Team Cup
Larry Ruhf; 31 Jackson Road
Belchertown, Ma. 01007
(413)-323-4340

June 24 : Portland, Or.
Marjorie Gerrish; 4885 S.W. 78th Ave.
Portland, Or. 97225
(503)-292-4316

July 9 : Oakland, Calif.
Michael Girvin; 4304 N. Ashland #2W
Chicago, Il. 60613
(312)-528-4106

July 15 : Meridan, N.H.
John Flynn; R.R. #2 Box 209-8
White River Junction, Vt. 05001
(802)-296-2158

July 16 : Easthampton, Ma.
Webtown Classic Team Comps.
Garry Lamothe; 18 St. James Ave.
Easthampton, Ma. 01027
(413)-527-9956

August 5 : Delaware, Ohio
Chet Snouffer; 51 Troy Rd.
Delaware, Ohio 43015
(614)-363-8332

August 6 : Cleveland, Ohio
Dave Boehm; Box 17385
Euclid, Ohio 44117
(216)-442-6024

Aug. 18, 19, 20 : Gunnison, Co.
1989 USBA Nationals
Jim Mayfield; 409 North Colorado
Gunnison, Co. 81230
(303)-641-3539

September 9 : St. Louis, Mo.
Tom Fitzgerald; 1159 Holly River
Florissant, Mo. 63031
(314)-839-1604

September 17 : Portland, Or.
Doug DuFresne; 4235 S.W. Crestwood
Portland, Or. 97225
(503)-292-4316

THIRD INTERNATIONAL TEAM CUP - 1989

The third International Team Cup is tentatively scheduled to be held in the Gaithersburg/Washington, D.C. area in June over a nine day period, spanning two weekends. Three team test matches will be separated by two individual events. The first will be an open tournament for throwers of any nationality for the purpose of determining an individual world champion. An additional match will be held to bring the best throwers in the world together for a special throw off. The prime event to be contested will be long distance since this event has not been held on American shores for quite some time. Other events such as MTA, Fast Catch & Super Catch may also be in contention. Contact ITC coordinator: Larry Ruhf (see address in middle column) or Jim Jordan (USBA Board) for more information on specific functions and dates.

INTERNATIONAL COMPETITION

April 29, 30 - Travemunde Cham.

Volker Behrens
Am Muehlenberg 11
2407 Bad Swartau
West Germany

June 3, 4 - Winnenden Cham.

Uli Konzelmann
Im Hummerholz 80
7057 Leutenbach 2
West Germany

August 5,6 - Berlin, W. Germany German Nationals

Gerhard Bertling
Putbusser Strasse 32
1000 Berlin 65
West Germany
(030) 4 63 42 99

September 9,10 - Evry, France International Competition.

Teams from all nations are invited.

Olivier Vouktchevitch
282, rue Lecourbe
75015 Paris, France
16 (1) 45 57 14 07

1989 USBA NATIONALS GUNNISON, COLORADO

The 1989 USBA Nationals will be a special treat this year as Jim Mayfield, manufacturer of fine boomerangs, organizes a special Friday night and two day boomerang festival on August 18, 19 & 20. This year the format will be altered from the long lines and extended waiting between throws to give everyone more opportunity to throw, demonstrate, learn from the pros, and have lots of fun with team competition, design and art shows, and night throwing. Bring your distance equipment as you can extend your range by 30% at the altitude of 7700 feet. Special arrangements need to be made for housing and inexpensive transportation from Denver to Gunnison, which is located 200 miles southwest of Denver, so write Jim immediately about your plans to compete this summer. Include how many persons will be in your party. Don't get left out of this one. Contact Jim now at:

Jim Mayfield
409 North Colorado
Gunnison, Co. 81230
(303)-641-3539

INTERCOLLEGIATE CHALLENGE MATCH

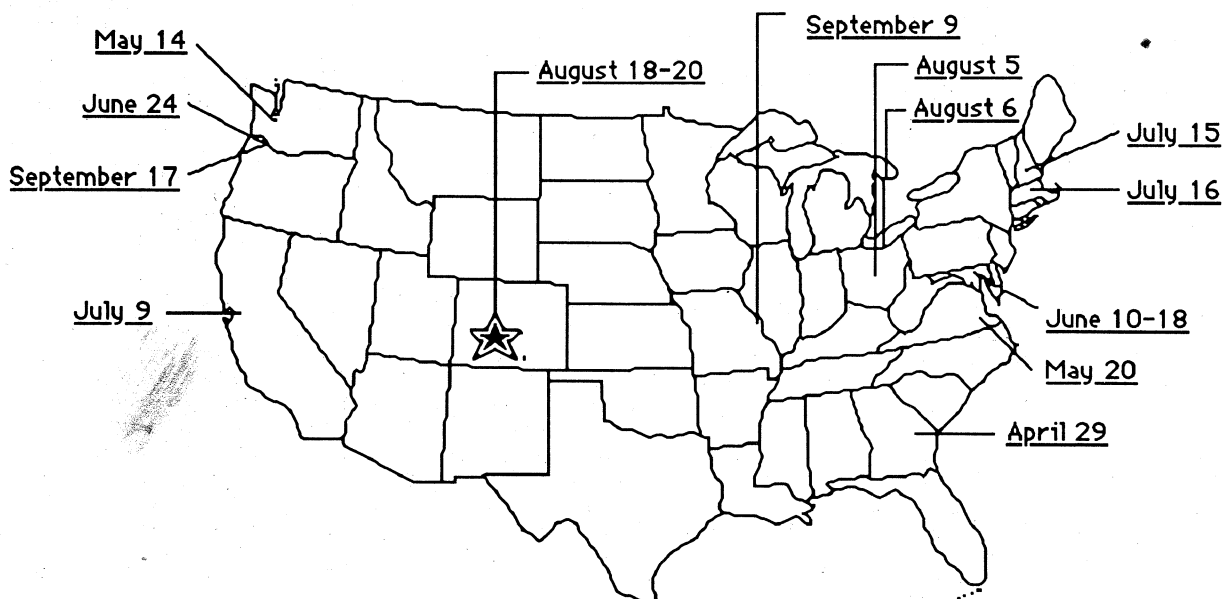
Michael "Gel" Girvin has graduated from Evergreen State College and moved to Chicago for art studies at the Chicago Art Institute (SAIC). He has not given up on his boomerang promotional activities. He is starting a boomerang club which meets at Grant Park across from the Art Institute in Chicago on Wednesdays and Fridays. Michael has several friends in other college locations who have also organized throwing groups. Peter "Pay" Rose has a club at Santa Cruz State College in California. Pay taught others to throw including his friends Jake and Randy who have started their own clubs at Reed College in Portland, Oregon and the University of Oregon at Eugene. Paul Kimball, who continues his enthusiasm at Evergreen State College in Olympia, Washington has agreed to host a massive intercollegiate boomerang competition between the five colleges and universities on April 7, 8 & 9. Other colleges are invited to participate in the festivities now or in future test matches. For more information, you may contact any of the following: Paul Kimball at Evergreen State College - (206)-943-2563; Jake Diston at Reed College - (503)-774-9182; Pay Rose at Santa Cruz State - (408)-458-2581; Michael Girvin at Chicago Art Institute - (312)-528-4106.

NEWS FROM FRANCE

Olivier Vouktchevitch of the French boomerang team "The Froggies" writes on news past, present and future: A total of four tournaments were held in France in 1988. These included Jacques Thomas' tournament mentioned in the Winter issue of MHR; the International Team Cup in Paris; a small tournament north of Paris at the end of September; and the French Nationals which took place in T-shirt weather in November. Olivier beat his personal best and the French record in Endurance at the French Nationals with a score of 61. He used a hot little fast catch developed by Uli Konzelmann. Olivier still says it's a long way to beat the American mustached devil, John Flynn who holds the world record with 70 catches. Olivier Vouktchevitch won overall to become the 1988 champion. His friend, Jacques Roudaut was runner up as vice-champion.

The town of Evry, which played host to the French leg of the ITC, is still excited about the positive effects the competition had on their town. They are still in awe of the effect that Team Gel had on the competitors during the award ceremony. The town of Evry has agreed to host another large International meet in September 1989. The German and Swiss competitors are already preparing to send teams. Other clubs from various nationalities (Sweden, England, etc.) are also invited to send teams. Contact Olivier Vouktchevitch at the address listed at the bottom of page two for further information.

USBA OPEN TOURNAMENTS - 1989 SEASON



USBA RATING SYSTEM FOR THE 1988 SEASON

by Tom Tuckerman & John Flynn

ACCURACY

Competitor's Name	Best Score	Rating Points	Competitor's Name	Average Score	Rating Points	Competitor's Name	Average Placing	Rating Points	Competitor's Name	Totals Placing	Rating Points
Mike Forrester	46	11.00	Chet Snouffer	29.25	11.00	Steve Kavanaugh	9.00	11.00	Chet Snouffer	29.00	11.00
Chet Snouffer	44	9.00	Ron Tamblyn	28.67	9.00	Chet Snouffer	7.62	9.00	Ted Bailey	19.50	8.50
Ted Bailey	42	8.00	Steve Kavanaugh	28.50	8.00	Dan DuCharme	5.90	8.00	Dan DuCharme	19.50	8.50
M. Giesnschljaj	40	7.00	Dan DuCharme	27.40	7.00	Ted Bailey	5.67	7.00	Steve Kavanaugh	19.00	7.00
Dennis Joyce	38	4.50	Dean Kelley	26.33	6.00	Peter Ruhf	5.50	5.00	Ron Tamblyn	14.00	6.00
Dan DuCharme	38	4.50	Ted Bailey	25.67	4.50	Michael Girvin	5.50	5.00	Mike Forrester	12.00	5.00
Ray Laurent	38	4.50	Chuck Smith	25.67	4.50	Ron Tamblyn	5.50	5.00	M. Giesnschljaj	7.00	4.00
Tim Maultsby	38	4.50	Doug DuFresne	25.33	2.50	Gary Broadbent	5.17	3.00	Dean Kelly	6.00	2.50
Peter Ruhf	35	1.00	BetsyLew Miale	25.33	2.50	Mike Forrester	5.00	1.00	Peter Ruhf	6.00	2.50
Neil Katmanson	35	1.00	Ray Laurent	25.00	1.00	BetsyLew Miale	5.00	1.00	Ray Laurent	5.50	1.00
Kris Almqvist	35	1.00				Jeff Lacount	5.00	1.00			

AUSTRALIAN ROUND

Competitor's Name	Best Score	Rating Points	Competitor's Name	Average Score	Rating Points	Competitor's Name	Average Placing	Rating Points	Competitor's Name	Totals Placing	Rating Points
Chet Snouffer	76	9.50	Doug DuFresne	63.33	11.00	Doug DuFresne	16.00	11.00	Doug DuFresne	31.50	11.00
Dennis Joyce	76	9.50	Gregg Snouffer	60.50	9.00	Ray Laurent	12.50	9.00	Chet Snouffer	25.50	9.00
Doug DuFresne	76	9.50	Chet Snouffer	56.50	8.00	Chet Snouffer	11.62	8.00	Barnaby Ruhe	18.50	8.00
Gary Knudsen	75	7.00	Barnaby Ruhe	56.00	7.00	Mike Krausser	10.88	7.00	Greg Snouffer	18.00	7.00
Barnaby Ruhe	72	5.50	John Koehler	55.00	6.00	Barnaby Ruhe	10.69	6.00	Ray Laurent	13.00	6.00
Steve Kavanaugh	72	5.50	John Flynn	54.40	5.00	Greg Snouffer	10.57	5.00	Steve Kavanaugh	12.00	5.00
Greg Snouffer	71	4.00	Ray Laurent	54.00	4.00	John Flynn	10.50	3.50	Dennis Joyce	9.50	4.00
Mark Legg	70	3.00	Steve Kavanaugh	52.50	3.00	Steve Kavanaugh	10.50	3.50	John Koehler	9.00	2.50
John Koehler	69	2.00	Mike Forrester	51.80	2.00	Mike Forrester	9.75	2.00	Mike Krausser	9.00	2.50
Mike Krausser	68	1.00	Mike Krausser	51.25	1.00	John Koehler	8.75	1.00	John Flynn	8.50	1.00

CONSECUTIVE CATCH

Competitor's Name	Best Score	Rating Points	Competitor's Name	Average Score	Rating Points	Competitor's Name	Average Placing	Rating Points	Competitor's Name	Totals Placing	Rating Points
Chet Snouffer	40	11.00	Chet Snouffer	13.75	11.00	Michael Girvin	8.47	11.00	Chet Snouffer	29.00	11.00
Dennis Joyce	20	9.00	Dennis Joyce	9.00	9.00	Dennis Joyce	8.29	9.00	Dennis Joyce	27.00	9.00
Gregg Snouffer	13	8.00	Gregg Snouffer	8.00	8.00	Greg Snouffer	7.62	8.00	Greg Snouffer	24.00	8.00
Steve Kavanaugh	11	7.00	Michael Girvin	5.40	7.00	Chet Snouffer	6.84	7.00	Michael Girvin	18.00	7.00
Rob Parkins	10	5.00	Gary Broadbent	5.33	5.00	Tom Peterson	6.41	6.00	Steve Kavanaugh	11.00	6.00
Roger Perry	10	5.00	John Koehler	5.33	5.00	Scott Huskey	6.25	5.00	John Koehler	8.00	5.00
Rick Tilford	10	5.00	Chuck Smith	5.33	5.00	Casey Larrance	6.08	4.00	Tom Peterson	7.50	4.00
Mike Krausser	9	3.00	Steve Kavanaugh	5.25	3.00	John Koehler	5.83	3.00	Roger Perry	6.50	2.50
Peter Ruhf	8	1.50	Roger Perry	4.75	1.50	Mike Krausser	5.71	2.00	Mike Krausser	6.50	2.50
Tom Peterson	8	1.50	Mike Krausser	4.75	1.50	Steve Kavanaugh	5.56	1.00	Gary Broadbent	5.00	0.20
									Rob Parkins	5.00	0.20
									Chuck Smith	5.00	0.20
									Scott Huskey	5.00	0.20
									Rick Tilford	5.00	0.20

DOUBLING

Competitor's Name	Best Score	Rating Points	Competitor's Name	Average Score	Rating Points	Competitor's Name	Average Placing	Rating Points	Competitor's Name	Totals Placing	Rating Points
Chet Snouffer	47	11.00	John Koehler	18.00	11.00	John Koehler	9.50	11.00	John Koehler	31.00	11.00
John Koehler	43	9.00	Chet Snouffer	16.75	9.00	Michael Girvin	9.47	9.00	Chet Snouffer	28.00	9.00
Rex Grasso	35	8.00	Michael Girvin	9.60	8.00	Chet Snouffer	8.25	8.00	Michael Girvin	24.00	8.00
Michael Girvin	25	7.00	Greg Snouffer	8.50	7.00	Doug DuFresne	6.75	7.00	Greg Snouffer	14.00	7.00
Greg Snouffer	19	6.00	Eric Darnell	7.00	6.00	Jim Jordan	6.22	6.00	Eric Darnell	10.00	5.50
Roger Perry	17	5.00	Roger Perry	5.00	5.00	Peter Ruhf	6.10	5.00	Roger Perry	10.00	5.50
Eric Darnell	15	4.00	Gary Broadbent	4.33	4.00	Gary Broadbent	5.83	4.00	Jim Jordan	8.50	4.00
Barnaby Ruhe	11	3.00	Dennis Joyce	4.17	3.00	John Flynn	5.80	3.00	Gary Broadbent	8.00	2.50
Dennis Joyce	10	2.00	Jim Jordan	3.60	2.00	Casey Larrance	5.79	2.00	Rex Grasso	8.00	2.50
Peter Ruhf	7	0.50	Barnaby Ruhe	3.50	0.50	Greg Snouffer	5.75	1.00	Doug DuFresne	7.00	1.00
Jim Jordan	7	0.50	Casey Larrance	3.50	0.50						

The 1988 Rating System is very similar to the rating system of 1987 with the following exceptions: (1) There are eight rated events instead of five. (2) If only one tournament score is entered, only the Best category is considered. If two tournament scores are entered, the average, including best score, is considered. Three

or more tournament scores include placing points. (3) There is a second route to ranking towards the final standings: Each event is ranked separately for the ten throwers with the highest point total of best, average, and placing. These final ranking points are then totaled to give the standings for the year.

ENDURANCE

Competitor's Name	Best Score	Rating Points	Competitor's Name	Average Score	Rating Points	Competitor's Name	Average Placing	Rating Points	Competitor's Name	Totals Placing	Rating Points
John Koehler	59	11.00	Chet Snouffer	47.00	11.00	Chet Snouffer	10.17	11.00	Chet Snouffer	30.00	11.00
M. Giesnschlag	56	9.00	Gary Broadbent	41.33	9.00	Rob Parkins	8.40	9.00	Gary Broadbent	22.50	8.50
Chet Snouffer	55	8.00	Rob Parkins	37.40	8.00	Gary Broadbent	7.83	8.00	Rob Parkins	22.50	8.50
Doug DuFresne	54	7.00	John Koehler	37.33	7.00	Doug DuFresne	7.75	7.00	John Koehler	21.00	7.00
Gary Broadbent	50	5.50	Roger Perry	36.00	6.00	John Flynn	7.70	6.00	Doug DuFresne	14.00	6.00
Rob Parkins	50	5.50	John Flynn	35.20	5.00	Max Belvedere	7.50	5.00	John Flynn	11.00	5.00
Roger Perry	49	4.00	Barnaby Ruhe	34.75	4.00	Paul Kimball	7.17	4.00	Roger Perry	10.00	4.00
Ray Laurent	48	3.00	Greg Snouffer	34.33	3.00	John Koehler	6.17	3.00	M. Giesnschlag	9.00	3.00
Will Gix	46	2.00	Ron Tamblyn	34.00	2.00	Mike Krausser	6.00	2.00	Max Belvedere	5.00	2.00
Larry Ruhf	45	0.33	Larry Ruhf	33.75	1.00	Michael Girvin	5.87	1.00	Barnaby Ruhe	4.00	0.50
Greg Snouffer	45	0.33							Paul Kimball	4.00	0.50
Jim Jordan	45	0.33									

FAST CATCH

Competitor's Name	Best Score	Rating Points	Competitor's Name	Average Score	Rating Points	Competitor's Name	Average Placing	Rating Points	Competitor's Name	Totals Placing	Rating Points
John Flynn	19.20	11.00	Chet Snouffer	25.12	11.00	Chet Snouffer	10.25	11.00	Chet Snouffer	30.00	11.00
John Koehler	21.23	9.00	Barnaby Ruhe	29.31	9.00	Doug DuFresne	10.00	9.00	John Flynn	23.00	8.50
Chet Snouffer	21.56	8.00	Doug DuFresne	32.83	8.00	Barnaby Ruhe	8.50	8.00	Barnaby Ruhe	23.00	8.50
Eric Darnell	22.12	7.00	Mike Forrester	36.58	7.00	John Flynn	8.00	7.00	Doug DuFresne	17.00	7.00
Barnaby Ruhe	23.38	6.00	Peter Ruhf	37.80	6.00	Michael Girvin	6.00	6.00	Peter Ruhf	12.50	6.00
Gary Knudson	23.83	5.00	John Flynn	39.85	5.00	Dennis Joyce	5.67	5.00	Eric Darnell	9.00	4.50
Greg Snouffer	24.76	4.00	Tim Maultsby	40.45	4.00	Peter Ruhf	5.60	3.50	John Koehler	9.00	4.50
Peter Ruhf	25.64	3.00	Steve Kavanaugh	40.49	3.00	Jim Jordan	5.60	3.50	Mike Forrester	7.00	3.00
Larry Ruhf	26.58	2.00	Eric Darnell	40.76	2.00	Paul Scott	5.50	2.00	Michael Girvin	6.00	2.00
Ken Reed	27.09	1.00	Bob Leiffeld	41.12	1.00	Will Gix	5.25	1.00	Gary Knudson	5.00	0.50
									Dennis Joyce	5.00	0.50

JUGGLING

Competitor's Name	Best Score	Rating Points	Competitor's Name	Average Score	Rating Points	Competitor's Name	Average Placing	Rating Points	Competitor's Name	Totals Placing	Rating Points
Barnaby Ruhe	51	11.00	Barnaby Ruhe	33.00	11.00	Chet Snouffer	10.12	11.00	Barnaby Ruhe	30.00	11.00
Chet Snouffer	39	9.00	Chet Snouffer	24.50	9.00	Casey Larrance	10.00	9.00	Chet Snouffer	29.00	9.00
Peter Ruhf	21	8.00	Jim Jordan	11.33	8.00	Barnaby Ruhe	9.67	8.00	Jim Jordan	15.50	8.00
Dennis Joyce	20	7.00	Mike Forrester	11.00	7.00	Paul Kimball	8.25	7.00	Mike Forrester	15.00	7.00
Jim Jordan	16	5.50	Peter Ruhf	10.33	6.00	John Koehler	7.50	6.00	Peter Ruhf	14.00	6.00
Will Gix	16	5.50	Dennis Joyce	8.60	5.00	Will Gix	6.50	5.00	Will Gix	13.50	5.00
Mike Forrester	15	4.00	Casey Larrance	7.50	4.00	Mike Forrester	6.17	4.00	Casey Larrance	13.33	4.00
Gary Broadbent	13	2.50	Will Gix	7.20	3.00	Doug DuFresne	6.00	2.00	Dennis Joyce	12.00	3.00
John Koehler	13	2.50	Gary Broadbent	6.67	2.00	Jim Jordan	6.00	2.00	John Koehler	8.50	2.00
Michael Girvin	12	0.33	Jacques Sabrie	5.50	1.00	Joe Siegel	6.00	2.00	Paul Kimball	7.00	1.00
Casey Larrance	12	0.33									
Jesse Robertson	12	0.33									

MTA 100

Competitor's Name	Best Score	Rating Points	Competitor's Name	Average Score	Rating Points	Competitor's Name	Average Placing	Rating Points	Competitor's Name	Totals Placing	Rating Points
John Denden	50.67	11.00	Roger Perry	34.01	11.00	Doug DuFresne	8.33	11.00	Roger Perry	24.50	11.00
John Koehler	49.01	9.00	Chuck Smith	33.74	9.00	John Denden	8.00	9.00	John Denden	20.00	9.00
Tim Schallberger	47.06	8.00	Larry Ruhf	33.34	8.00	Ray Laurent	7.33	8.00	Larry Ruhf	17.50	8.00
Roger Perry	43.87	7.00	Barnaby Ruhe	31.63	7.00	Larry Ruhf	7.25	6.50	Doug DuFresne	14.00	7.00
Sean Marquardt	43.32	6.00	Chet Snouffer	31.59	6.00	Roger Perry	7.25	6.50	Chet Snouffer	10.00	6.00
Dean Kelly	43.04	5.00	Gary Broadbent	31.03	5.00	Max Belvedere	6.50	5.00	John Koehler	9.00	4.00
Jam. McLeMore	42.69	4.00	Dennis Joyce	29.97	4.00	Chet Snouffer	6.25	4.00	Chuck Smith	9.00	4.00
Larry Ruhf	42.66	3.00	Doug DuFresne	29.15	3.00	Dennis Joyce	6.17	3.00	Ray Laurent	9.00	4.00
Mole Man	41.53	2.00	Jacques Sabrie	28.66	2.00	Tom Peterson	6.00	2.00	Barnaby Ruhe	8.00	1.50
Ray Laurent	40.75	1.00	Dean Kelly	28.61	1.00	Barnaby Ruhe	5.75	1.00	Tim Schallberger	8.00	1.50

USBA 1988 OVERALL PLAYER RANKINGS

Listed below are the overall competitor rankings based on total ranking points from the last column on pp 4 and 5.

#	COMPETITOR	PTS.
1.	CHET SNOUFFER	77.0
2.	JOHN KOEHLER	36.0
3.	DOUG DuFRESNE	32.0
4.	BARNABY RUHE	29.5
5.	ROGER PERRY	23.0
6.	GREGG SNOUFFER	22.0
7.	STEVE KAVANAUGH	18.0
8.	MICHAEL GIRVIN	17.0
9.	DENNIS JOYCE	16.5
10.	MIKE FORRESTER	15.0
11.	JOHN FLYNN	14.5
11.	PETER RUHF	14.5
13.	JIM JORDAN	12.0
14.	GARY BROADBENT	11.2
15.	RAY LAURENT	11.0
16.	ERIC DARNELL	10.0
17.	JOHN DERDEN	9.0
18.	ROB PARKINS	8.70
19.	TED BAILEY	8.50
19.	DAN DuCHARME	8.50
21.	LARRY RUHF	8.00
22.	MATT. GEISENSCHLAJ	7.00
23.	RON TAMBLYN	6.00
24.	WILL GIX	5.00
24.	MIKE KRAUSSER	5.00
26.	CHUCK SMITH	4.20
27.	TOM PETERSON	4.00
27.	CASEY LARRANCE	4.00
29.	REX GRASSO	2.50
29.	DEAN KELLEY	2.50
31.	MAX BELVEDERE	2.00
32.	PAUL KIMBALL	1.50
32.	TIM SCHALLBERGER	1.50
34.	GARY KNUDSON	0.50
35.	SCOTT HUSKEY	0.20
35.	RICK TILFORD	0.20

USBA NEWS

It's time to plan for the 1989 USBA Annual Meeting which will be held at the USBA Nationals in Gunnison, Colorado on August 18-20.

A slate of nominees for positions on the USBA Board of Directors needs to be defined at this time. If you are interested in serving on the board, please contact the USBA President: Dennis Joyce immediately so that the names can be published in the summer issue of MHR. Get involved! Mail your intentions to:

Dennis Joyce
44 Lucinda Ct.
Hampton, Va. 23666

Betsy Miale, Chairperson of the Bylaws Revision Committee has proposed that the following amendments be voted on at the 1989 Annual Meeting:

- 1) Add to Art. III, Sec. 2 - "Every such committee shall submit a report of its activities and recommendations to the Board of Directors for review and determination of action to be taken, if any, by the Board based upon said report and recommendations."
- 2) Amend Art. VI, Sec. 2 to read - "A quorum to do business at any meeting of the Board of Directors shall be five members of the Board."
- 3) Add Sec. 4 to Art. VI - "A quorum to conduct Board business by mail ballot shall be five members of the Board of Directors."

The above revisions are required to clarify sections in the current bylaws. A copy of the current bylaws will be available at the Annual Meeting during the discussions centered around these changes.

Chet Snouffer, Chairperson of the Rules & Rating System Committee has submitted the following changes to the USBA rules effective for the 1989 season and based upon the decisions of the Rules Committee work this fall and winter:

Accuracy, Fast Catch, Juggling and MTA₁₀₀ are essentially unchanged from last year.

Australian Round will remain unchanged from last year's rules with the exception that it will be rated evenly with the other events in tournament placing.

Consecutive Catch and Doubling will feature the stipulation that in one hand catches, "the boomerang may not touch any part of the body above the

elbow on the catching hand". In addition, a count-up format will be employed in both events. Each thrower will attempt 12 catches in **Consecutive Catch**. They are: *any catch; one-handed with the LH; one-handed with the RH; behind the back; under the leg; and foot catch*. The sequence is then repeated. A perfect score is 12 catches. If more than one person completes all 12 catches, then a "sudden death" repeat of the sequence is used to decide the winner. In **Doubling**, each thrower gets 6 tosses. The catching sequence becomes: *any catch; one handed catch, either hand; one handed catch, one in each hand*. This sequence is then repeated. A perfect score is 12. The "sudden death" format is employed to break ties.

In **Endurance**, groups of at least four throwers must use concentric 2 and 20 meter circles. A one minute warm-up period before a thrower starts his round is the only practice allowed. All other competitors must either count or spot for range and foot faults.

Interference includes another person's boomerang in flight, a bird, or a range steward or official. It does not include a competitor running into an official, but only the boomerang in flight. In addition, a stipulation has been added to cover another competitor who catches your boomerang. The competitor who catches the wrong boomerang receives no credit for the catch and, if in sudden death format, is eliminated. The *offended thrower* receives a re-throw.

The rating system remains the same except that with three or more tournaments, the **median** score will be entered, as opposed to the **arithmetic average**. It is hoped that the change will encourage throwers to participate throughout the season and in *bad wind* tournaments without fear of damaging their average.

Copies of the complete rules revision may be obtained immediately, from:

USBA
P.O. Box 182
Delaware, Oh 43015

Please enclose a SASE with 45 cents postage. The complete new **Rule Book** will be available shortly through the above address or through the USBA Store. Pricing information or specific rule interpretations can be obtained by calling Chet Snouffer at (614)-363-8332 during reasonable hours.

1988 INTERNATIONAL TEAM CUP - EUROPE

by John Flynn

Amidst the tense battles between the teams for the cup, there were three open tournaments, one at each site, to let the throwers as individuals see how they stacked up "on any given day". The open tournaments provided chances to try out the throwing fields and different sticks before the team matches. However, any insights gained would be tempered by new and radically different weather conditions that moved in for the team comps on the following days. So what it boiled down to was three competitions with no strings attached, no ratings, and only as much pressure as each individual wanted to put on him/herself. The only problem was one familiar to anyone who has been to large tournaments: They took a long time to get through. The strategy of whether to cut loose or conserve for the team was an ever present dilemma pondered by the throwers. Once in the circle though, conservation was apparently not on many people's minds. A summary follows

20 Aug: Geneve, Switzerland

The day began ominously as the gray skies opened early, drenching the field and anyone foolish enough to be on it (there were about 50 of us). After a two hour

delay the rain let up, the winds were calm, and the contestants decided it was time to go for it. So go for it we did. Barnaby Ruhe made 83 look easy in Australian Round, but not as easy as Doug DuFresne who popped a cool 80 with five 30-metre bullseyes. John Flynn caught 70 of 72 throws in five minutes to break his week old world record of 67 in Endurance, while Uli Konzelmann of West Germany also got over the 60 hurdle with 61 catches (some day Uli will do 90 in Endurance - while his MTA is still in the air). Chet Snouffer nipped Uli by .30 in the one and only round of fast catch, due to the delay, and Mike Forrester took out the field in MTA₁₀₀. Torsten Fredrich was perfection in consecutive catch. He caught his first 12 - two rounds of two-hand, LH clean, RH clean, behind-the-back, under-the-leg, feet - but so did Michael Siems and Michael Gel Girvin. No worries though, he did it again to put the issue to rest. After all the great throwing of the day, who was the overall winner? Rob Croll of Australia, that's who. No top finishes, but no bombs either, proved to be the right recipe.

23 Aug: Weinheim, W. Germany

This was a pretty amazing place to throw, period. A grass airstrip with hang gliders, airplanes, hot air balloons, and boomerangs, often partaking in their respective pleasures at the same time. The weather was warm and hazy with a light, very tricky wind that spanned 180 de-

grees. After Chet Snouffer won consecutive catch with 12/12, the field of 60 was split in half, one group doing fast catch and the other doing Australian Round. Remember, tricky winds. Whether in Aussie Round or Fast Catch, first group throwers were subjected to a subtle form of torture by the shifting breezes. One exception was John Flynn, who walked into the fast catch circle only to find no wind. He quickly assembled the timers and spotters and put a 20.77 on the board as the winds returned as if on cue. When the groups switched events, the breezes let up and became more predictable. Accordingly, people started nailing scores right and left. Flynn's time barely held up as Olivier Vouktchevitch (21.31) and Michael Siems found the line, and they had plenty of company. Tenth place was 24.19 and 22nd place was a respectable 29.97 seconds. Chet took the Aussie Round with 80, Uli Konzelmann took MTA₁₀₀, and Barnaby Ruhe repeatedly nailed his personal best of 63 in Endurance. Other personal bests in Endurance was Chet (61), Olivier Vouktchevitch and Volker Behrens (59), and Mole Man and Larry Ruhf (56). A fitting end to a marathon day. The overall omnipotent boomerang master-without-peer this time: Jet Snoover of Delaware, Ohio.

27 Aug: Evry, France

The best part of the day was seeing USA Blue Team captain Peter Ruhf throwing boomerangs for the first time since being injured at the Geneve team test six days earlier. The field at Evry, a suburb of Paris, was a wide expanse of perfectly flat lawn with an ancient aqueduct at the far end, down wind. The weather was sunny and breezy, perfect conditions to tune up for the big showdown between USA Blue, USA Red, and the West Germans for the cup (Hah! Little did we realize that 35-40 MPH winds would take center stage the next day and derail any thoughts of a conventional tournament!). Some new names and faces showed up at the top of each event. Switzerland's Matthieu Weber took Australian Round with 57, while Peter Ruhf shook off the rust and tied Torsten Fredrich for second with 54. Eric Darnell out-caught Chet and Michael Siems in Consecutive, and West Germany's Carsten Palfner took MTA₁₀₀ with 33.41 seconds, forcing Larry Ruhf to settle for second place. But the guy doing the solid throwing was Horst Faika from West Germany, the man with the shiny



THE COMPETITION BEGINS

orange shoes. He was second to Doug DuFresne's 49 in Endurance and took Fast Catch with a crisp 30.83 in the wind. It looked like the day was his but a mediocre placing in Consecutive Catch came back to bite him. In the European scoring system, each point gets a point for whatever place he/she finishes in an event, one point for first, 2 for second, 40

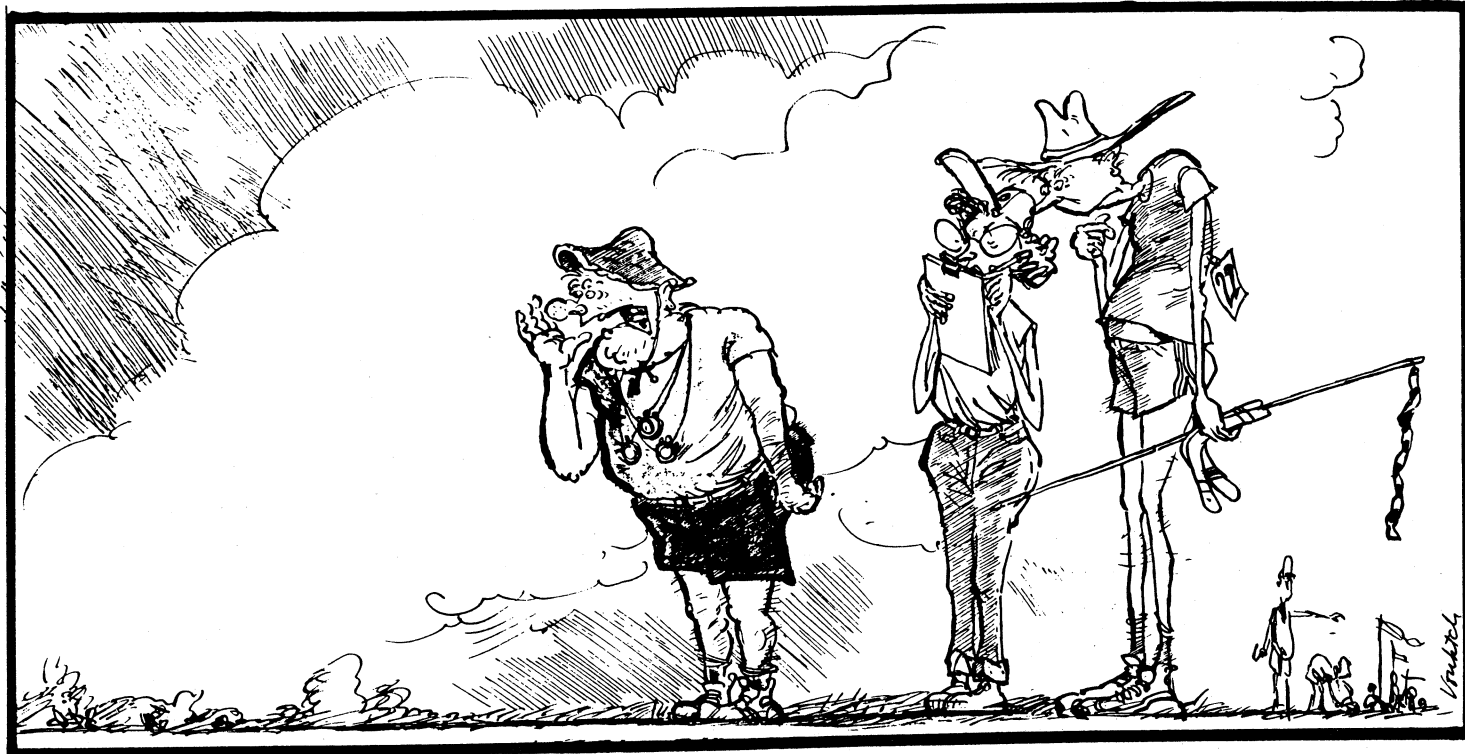
for fortieth, etc. Add up all the points at the end and the low score wins. A couple of catches kept Horst out of a first-place tie with the overall king for the day, Uli Konzelmann.

What does all this mean? Well, it's anybody's game now. The open tournament showed, more so than the team re-

sults, that any equipment or talent gaps that may have existed between continents are quickly becoming history. More and more throwers are filling their bags with quality boomerangs that they know how to use. That's progress, and hopefully as competition gets keener and performances improve, so will the fun.

1988 INTERNATIONAL TEAM CUP RESULTS FOR TEAM COMPETITION

TEAM NAME	NATIONALITY	GENEVE (8/21/88)	WEINHEIM (8/24/88)	PARIS (8/28/88)	TOTAL PTS.	PLACE
TEAM RED	USA	34	25	38	97	1
TEAM BLUE	USA	33	27	25	85	2
DAS TEAM	GERMANY	16	32	26	74	3
TEAM FRANCE	FRANCE	19	26	19	64	4
TEAM AUSTRALIA	AUSTRALIA	21	17	16	54	5
TEAM SWISS	SWITZERLAND	13	10	12	35	6
TEAM KANGA	INTERNATIONAL	11	9	10	30	7

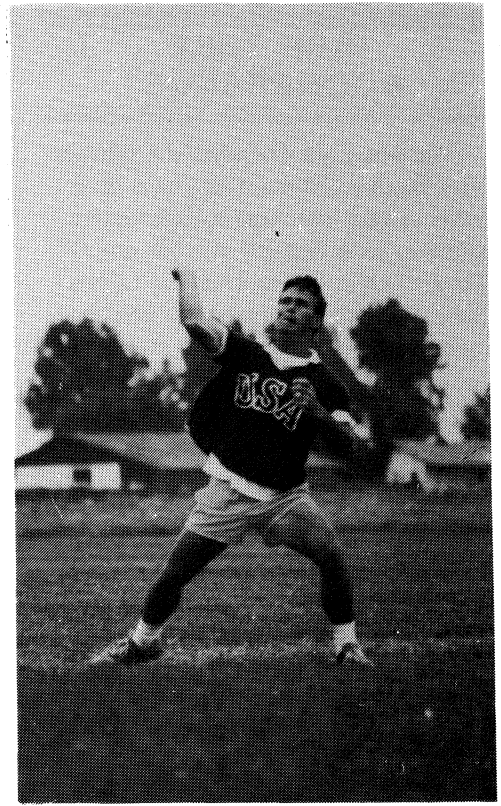


Will the judge on the 20 ask the judge on the 30 to ask the judge on the 40 to tell the judge on the 50 metre line that it's his turn now!

a cartoon by Olivier Voukchevitch



Ben Ruhe & Wilhelm Bretfeld study an in-flight MTA



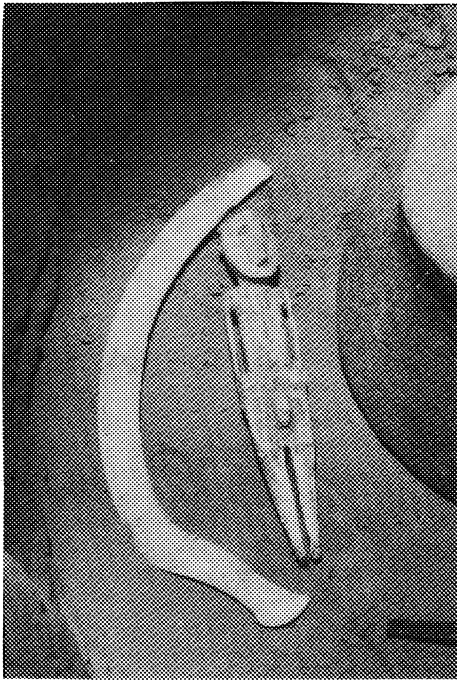
Chet pops a winning throw

1988 INTERNATIONAL TEAM CUP INDIVIDUAL EVENT BEST RESULTS

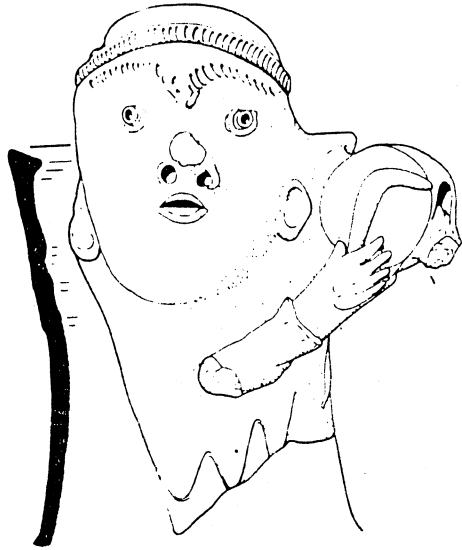
EVENT	GENEVE (8/20/88)			WEINHEIM (8/23/88)			PARIS (8/27/88)		
FAST CATCH	1. USA	C. Snouffer	22.60	1. USA	J. Flynn	20.77	1. GRMY	H. Faika	30.83
	2. GRMY	Uli Konzelmann	22.90	2. FRAN	O. Vouktchevitch	21.31	2. AUST	R. Croll	31.94
	3. USA	Moleman	24.73	3. GRMY	M. Siems	22.27	3. GRMY	U. Konzelmann	32.72
CONSECUTIVE CATCH	1. GRMY	T. Frederich	12+(12)	1. USA	C. Snouffer	12	1. USA	E. Darnell	9
	2. USA	M. Girvin	12+(10)	2. ITAL	M. Belvedere	11	2. USA	C. Snouffer	8
	3. GRMY	M. Siems	12+ (5)	2. GRMY	T. Munch	11	3. GRMY	M. Siems	7
MTA 100	1. USA	M. Forrester	38.58	1. GRMY	U. Konzelmann	38.84	1. GRMY	C. Palfner	33.41
	2. USA	L. Ruhf	37.76	2. GRMY	T. Hartmann	35.72	2. USA	L. Ruhf	29.30
	3. GRMY	U. Konzelmann	36.38	3. USA	E. Darnell	34.25	3. USA	M. Girvin	29.06
ENDURANCE	1. USA	J. Flynn	70	1. USA	B. Ruhe	63	1. USA	D. DuFresne	49
	2. GRMY	U. Konzelmann	61	2. USA	C. Snouffer	61	2. GRMY	H. Faika	47
	3. USA	C. Snouffer	58	3. GRMY	V. Behrens	59	3. USA	C. Snouffer	46
				3. USA	J. Flynn	59			
				3. FRAN	O. Vouktchevitch	59			
AUSTRALIAN ROUND	1. USA	B. Ruhe	83	1. USA	C. Snouffer	80	1. SWIT	M. Weber	57
	2. USA	D. DuFresne	80	2. USA	E. Darnell	77	2. USA	P. Ruhf	54
	3. USA	J. Flynn	77	3. USA	J. Flynn	76	2. GRMY	T. Frederich	54
				3. FRAN	S. Marguerite	76			
OVERALL PLACING	1. AUST	R. Croll	42	1. USA	C. Snouffer	19	1. GRMY	U. Konzelmann	32
	2. USA	C. Snouffer	43	2. USA	J. Flynn	24	2. USA	B. Ruhe	38
	3. USA	E. Darnell	44	3. USA	B. Ruhe	52	3. USA	M. Girvin	40
	4. USA	L. Ruhf	48	4. GRMY	R. Krug	53	4. GRMY	H. Faika	43
(European Scoring System)	5. GRMY	M. Siems	49	4. USA	G. Snouffer	63	5. GRMY	M. Siems	46

ARE THEY BOOMERANGS?

The editor often receives the strangest contributions. These things have been held out until there was enough material to group them together into one article. The first contribution, from Dr. Leziro Silva of Brazil, originated in a French archaeological magazine report on a Neolithic Culture from the Negev Desert in Palestine. The Chalcolithic objects illustrated below have an age of from 5,000 to 6,500 years. Most of the associated relics were strongly influenced by the Egyptian and Mesopotamic civilizations. Is the object on the left a throw stick or not? Can any of the readers shed some light on this archaeological relic?

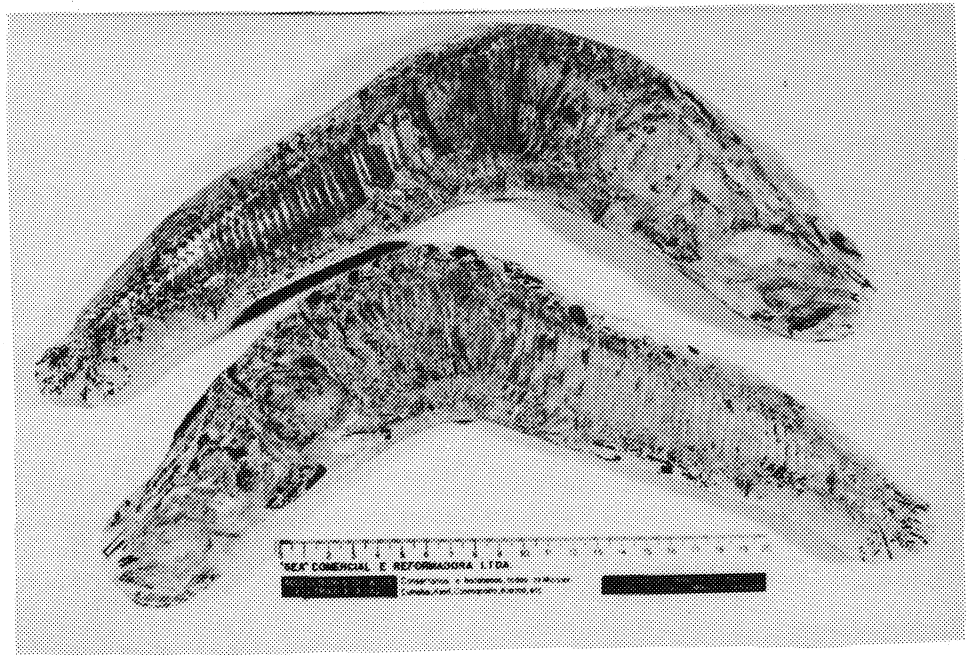


The contribution pictured at the right was contributed by Dr. Leziro Silva of Brazil. The fossilized boomerang fish concretions, called "ichthyolites" are from the Araripe Plateau, Ceara' State, in the Northeast Region of Brazil. The fossils, from the Mesozoic/Cretaceous period are approximately 30 cm from head to tail (or is it tip to tip?). Their age is approximately 140,000,000 years. Are these the oldest boomerang shaped objects known? Can any of the readers identify other fossils or objects with a greater age?



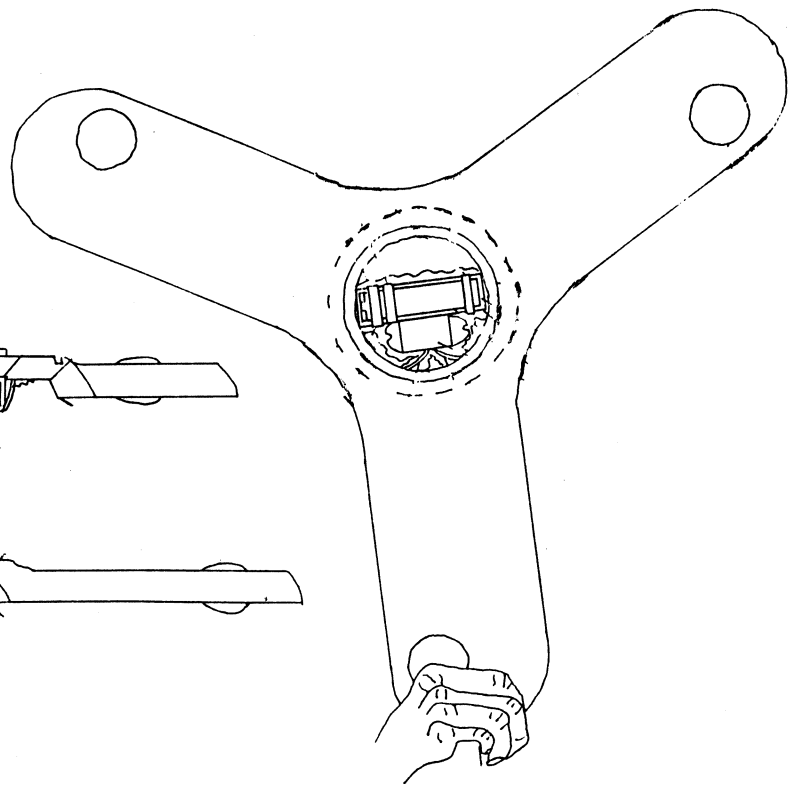
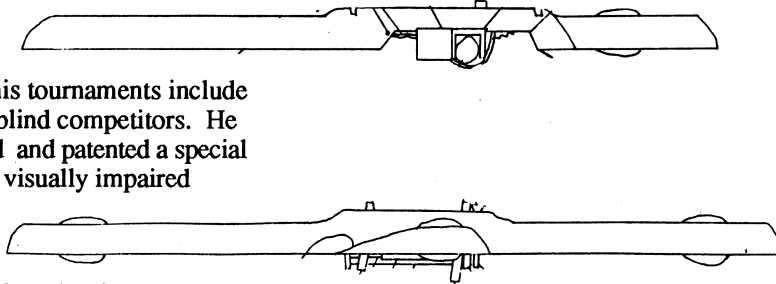
The Boomerang Man contributed the item illustrated above. The source is the August 1986 issue of "FOLK ROOTS", a British publication. The article relates the following: "Here's some archaeological news. The enclosed drawing shows the spout of a pottery jug found at a mediaeval kiln site at Earlswood near Reigate in 1974. The figure can be seen playing a drum (a tabor?) with an L-shaped beater. The other arm remains missing." To this, the editor of "FOLK ROOTS" replied: "I reckon he's hitting his drum with a boomerang. My theory is that these islands were once packed solid with aboriginal bodhran players, just as folk festival bars are to this very day."

Gary Broadbent has located one of the strangest groups of fictional characters ever to appear on the market at non other than the McDonald's fast food chain of stores. In January, the company started selling a series of several inexpensive (49 cents plus tax) doll like characters in their happy meal boxes. The characters were named (what else) **McNUGGET BUD-DIES**. One of the earliest characters was named: **BOOMERANG McNUGGET**. The potato head shaped doll, pictured below, sports an Aussie hat, long yellow hair, and a belt with several survival tools including a yellow boomerang. The package contains the following words of greetings: "G'day mates, I'm Boomerang McNugget. I live in Australia where I have a Koala Bear for a friend and I ride a giant pet Roo! That's Kangaroo to you Mate."



RADARANG

Matt Hannifin of Austin, Texas has been active in the promotion of boomerang competition in his region. He has received extensive press coverage in "The Daily Texan" newspaper and the "Austin-American-Statesman" publication. What makes Matt Hannifin different from most promoters is that his tournaments include special events for blind competitors. He has even developed and patented a special boomerang for the visually impaired thrower using a modified NERF tri-blader with a noise generator on board. The boomerang, illustrated in the patent figures to the right, was demonstrated at the 1988 USBA Nationals. Matt will market his product to needy visually impaired throwers through the address listed to the right. He would be interested in obtaining information on where he can purchased quantities of Nerf tri-bladers at a good price to help defray the cost of his product.



Matt Hannifin
4405 Duval
Austin, Tx 78751

BOOMERANG RESEARCH

Deborah Reynolds of Cahokia, Il. and Michelle Siess of Labadie, Mo. are senior Aerospace Engineering students at Parks College in Illinois across the river from St. Louis. They have decided to do a research paper (for their measurement techniques class) on the static forces acting on a boomerang airfoil at different orientations. The results will add an important link to defining boomerang kinematics and will be presented in a technical paper at the AIAA conference in Minneapolis, Mn. in April. The research will pave the way for future studies on the dynamics of why a boomerang returns and may possibly be incorporated into the computer analyses presented in earlier editions of this newsletter. Anyone interested in obtaining a copy of the technical paper when it is made available should contact the editor of MHR immediately.

NEW PRODUCTS

Dan Russell, has an extensive supply of 10-ply 5mm Finish Birch for sale to domestic members. Each sheet is 19 1/2" X 29 1/2" and costs \$10, which includes shipping. There is a minimum order of 3 sheets. Dan also has standard sized Cyalume capsules for night throwing at a cost of 40 cents each. There is a minimum order of 10 pieces. You can order either of these products from Dan at:

Dan Russell
P.O. Box 84895
San Diego, Ca. 92138

There are new versions of the Boomerang Fever out on the market. One model is made out of a dense plastic and has a range of 40+ metres. Other models come in a new light weight plastic in red, yellow, or black. Ask for these where fine boomerang products are sold, or call Bill Springer at 215-433-2200 for more information.

Eric Darnell has a catalog which includes many innovative variations to his Wizard boomerang made famous by the Ruhe/Darnell book/boomerang. Eric has a few of these out of print book available for sale. For more info, write:

Turning Point, Inc.
South Strafford
Vermont 05070

A new source for boomerangs has been discovered in an Argentinian market by Bill Bailey, the editor's brother. The market place at the following address has attractively painted plywood standard shaped boomerangs for sale at a low price. If you are ever in the area and speak spanish, drop in and buy one at:

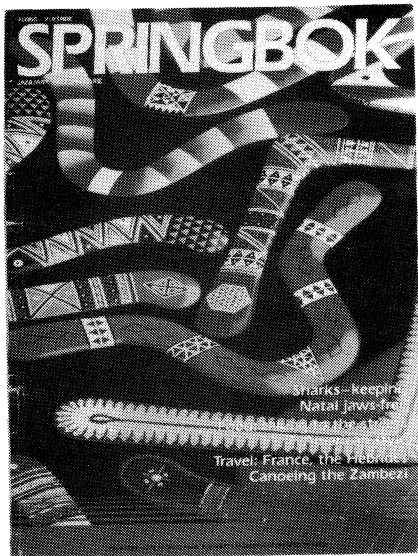
**GALERY SUR Y Rincon de
NORMA Y GUSTAVO
IBERLUCIA 1243
La Boca, Buenos Aires
Argentina**

BOOMERANGS IN LITERATURE, MUSIC, AND ON TV

Have you watched any old movies lately. There's a 1947 movie called "Boomerang" starring Arthur Kennedy and Dana Andrews about a true life account of a man who murders a clergyman.

Peter Carlin, a journalist from Portland, Oregon, is compiling an article for travelers who read the in-flight magazine, **AMERICAN WEST**. The magazine is available to passengers on America West Airlines based in Phoenix, Arizona. It is scheduled to appear sometime in early summer, 1989.

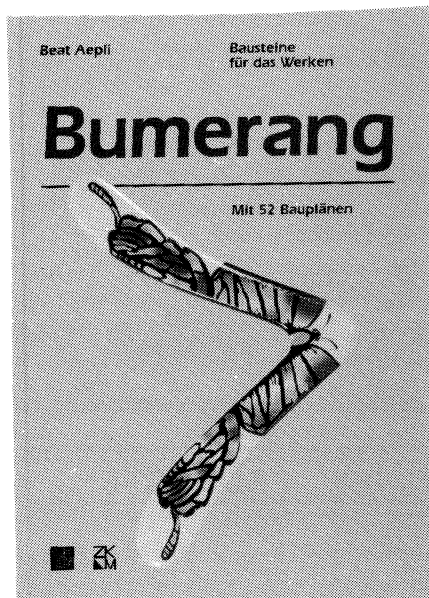
Kim Deutschmann really hit the big time with in-flight magazines when an extensive article appeared in the January 1989 issue of **SPRINGBOK**, a bilingual (English/African) South African publication. Kim made the cover, pictured below, and had several pages and colored photos devoted to telling his story in Africa. For those of the readers unfamiliar with Kim's works, his boomerangs are brightly decorated with Zulu art and are among the most coveted art boomerangs in any collection. If you don't have one, you should check your boomerang distributor for Kim's Zulu art boomerangs today.



Beat Aepli, an influential contributor to the Swiss Boomerang Federation and editor of the SBF newsletter, has recently written and released a hard cover text, in German, titled "**BUMERANG**". Sections include: prehistoric boomerangs; how to make, throw, and tune boomerangs; and a photographic panorama of many quality boomerangs from his col-

lection. There is a large suffix with 52 boomerang plans, indicating both scale and airfoil contour. Many color and night action photographs grace the center section of the book. Signed copies of the book can be purchased directly from Beat Aepli for (Swiss Francs) SFr 41.30 (includes postage) at the following address:

Beat Aepli
Gfeld
CH-9043 Trogen
Switzerland



Jim Gasser, of Toledo, Ohio captured a **Winnie the Pooh** cartoon on Saturday morning titled "Honey for a Bunny". A boomerang plays a major role in this cartoon. Two of the characters try to knock down a bee hive with a 'rang. The boomerang returns again and again throughout the remainder of the 10 minute cartoon at the most inappropriate times, making their lives miserable.

Boomerangs are making their appearance in song and poetry with the identification of three new contributions. The first is the poem by Carl Lindner on the following page.

An interesting modification to the Kingston Trio song "Charlie and the MTA" appeared in issue number three of the St. Louis Boomerang Club newsletter. The verse was re-written by John T. Kellogg of St. Louis after he witnessed a flight of more than one minute at the first annual St. Louis Boomerang Tournament last September.

Dale Riendeau contributed an excellent tape of the song "**SAWDUST IN MY BEER**", written by Ross Linton. It came complete with musical accompaniment. The verse, slightly Gel-X-rated, focuses on the aggravation that boomerang manufacturers experience with the ever present sawdust generated by power tools. For those readers who feel that they must have a copy, they can offer a trade to Dale at the following address:

Dale Riendeau
P.O.Box 484
Jackson, Ca 95642

Garry Lamothe has discovered that the popular video game system, **Nintendo**, has several games that use boomerangs as weapons or defensive tools. These games include:

Zelda I & II
Castlevania I & II
Gun Smoke
Goonies II
Ikari Warriors II
Karnov
Ninja Kid
Tri-Force
Kung Fu

Robert Quinn of Holliston, Ma. mailed MHR a copy of an excellent newspaper article from the December 5, 1988 issue of **The Boston Globe**, written by Davis Bushnell. The article, which included several photos, focused around John Flynn and his experiences with boomerangs. To avoid leaving the readers hanging with "How do I get involved too?", the article terminated with a short paragraph on how to join the USBA. The organization can always use this kind of help. Thanx John and Davis!

Bob Quinn also noted that the December, 1988 issue of **Byte** magazine advertised a product called "boomerang" which is a battery backup for the IBM PC. If there is a power outage, the device makes a file of the memory and places it on the hard disk for later retrieval.

Pictured on the following page are two new greeting cards that have been identified and sent to MHR for this column. One has a Happy Birthday theme while the other is a Get Well Card. There are many more of these cards on the store shelves. Keep your eyes open for them and send them in to MHR.

BOOMERANG

by Carl Lindner

Chevron cut
from tree-heart,
the shape

of geese
against the sky,
this thing

was meant to fly.
End over end,
angling into light,

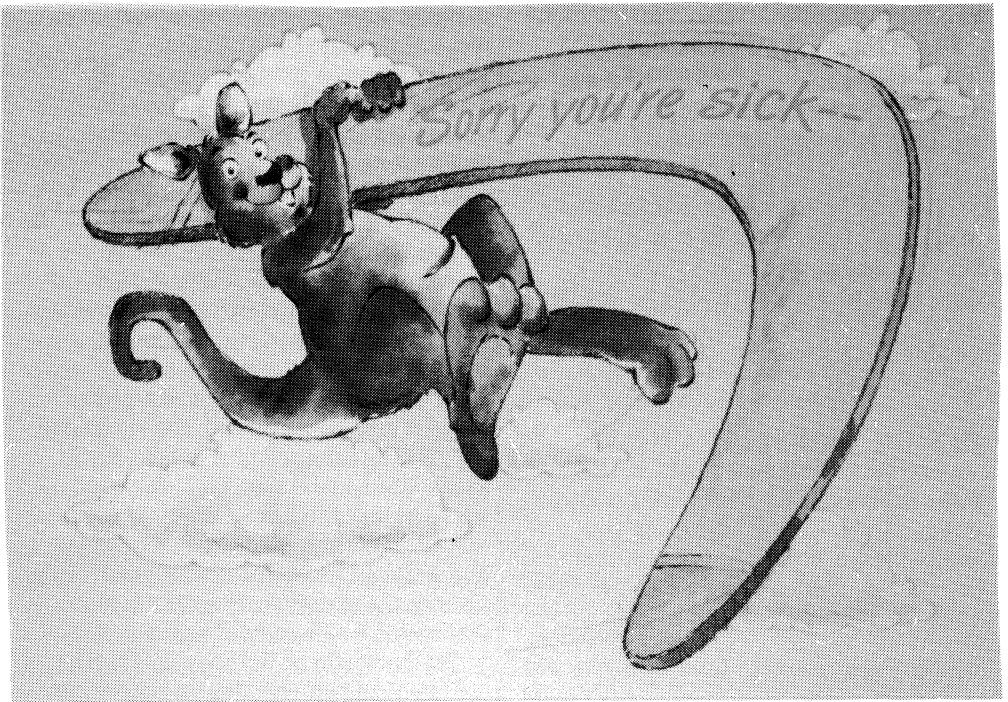
it sings
of the quick release,
the getaway

through what
escapes the eye,
and then

the turning sharp
and tightening of arc-
the over-

the shoulder look-
the swooping back
and down

to where it began.

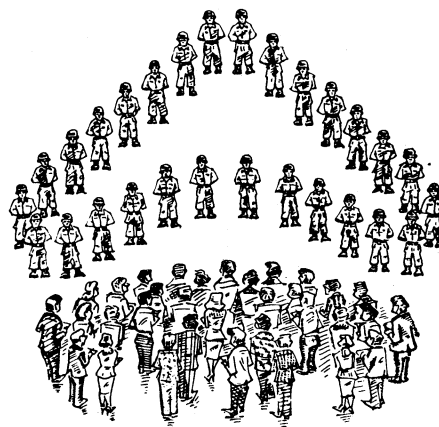


HAPPY BIRTHDAY

H.L. Mayhew mailed in the following contribution: USBA Director Garry Lamothe, VCR tape archivist, has a hidden talent - spare time cartooning. When asked to portray a right handed, boomerang throwing cricket, he responded as illustrated below:



My name is Gemini Cricket, and I would like to enter the Doubling event.



The real unveiling of the Stealth Bomber.

MAKING A HARDWOOD LAP-JOINT BOOMERANG

By Melvin Wallace

There are several major considerations in making a boomerang from sandwiched, lap-joint hardwoods. Design considerations include: selecting and obtaining the wood; selecting the tools to be used; making the boomerang; flight tuning it; and painting it.

DESIGN CONSIDERATIONS

For the first time, it might be best to make the boomerang from a tried and true design. If you have a boomerang you wish to make, draw it to full scale or copy the planform in figure 1 below for a small 20 meter RH V-rang.

SELECTING THE WOODS

The woods can be obtained from any local lumber supplier that sells hardwood. Make sure it is a good grade lumber without knots. The phone book should list possible sources.

SELECTING THE TOOLS

Power tools and hand tools can be used to make the boomerang. A table or radial saw, band saw, and a disc sander make the job much easier. If you don't have access to them, a coping saw, wood rasp, handsaw, knife, and sandpaper can be used.

MAKING THE BOOMERANG

Divide the boomerang into two parts with the lap-joint at the elbow and draw rectangles around each arm. Measure the dimensions of each rectangle as depicted

in figure 2 below. Decide how many types of wood you wish to put into each arm. A total of 8 pieces make up each boomerang, 4 pieces in each arm with lapping at the elbow.

Cut the boards to the size of the rectangles adding a little extra length and width for safety. Then resaw the boards on edge to a thickness of 1/16". If you wish to use fewer pieces per boomerang, resaw the boards to 1/8" and lap only 4 pieces.

Four pieces are then glued together for each arm, then clamped, and allowed to dry. Any good wood glue is fine. Each sandwiched arm is now 1/4" thick and slightly longer and wider than is needed.

Cut the sandwiched boards to length and width on the table or radial saw. Overlap the sandwiched boards and mark the lap-joint very carefully as in figure 2.

Set the height of the blade on the saw so it will cut half way thru the sandwiched board as depicted in figure 3. Cut a piece of scrap first to check the depth of cut. A hand chisel may be used for this step if

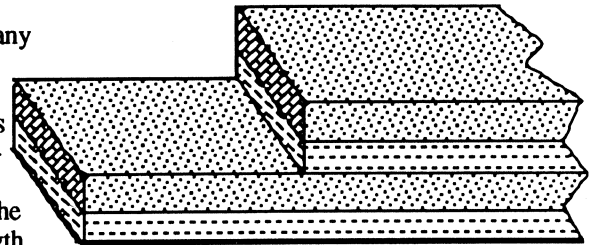


Figure 3 - Lapping boards

you do not have a saw.

Clean up the joint. Then glue and clamp it. It is important to make sure that the lapping pieces match up before gluing. Make sure that the boards don't slip when you clamp them. Gaps in the joint will make the boomerang look bad and be weak.

When the glue has dried, draw the boomerang on the blank and cut out the planform with a band saw or a coping saw. Carve the airfoil (see figure 1) on the blank with a rasp or disc sander and sand it smooth. Rasp and disc sander marks can be removed by wetting the surface of the wood and scraping it with a sharp knife.

FLIGHT TUNING

A good consistent throw is needed to flight tune a boomerang. This should be done in little or no wind.

If the boomerang sinks to the ground: check for negative angle of attack or dihedral. If none is found, then throw a little harder. If the arms have a negative angle of attack or dihedral, heat the blades over a burner (don't burn it) and twist and/or bend the arm to a neutral or slightly positive angle of attack and dihedral.

If the boomerang 'climbs' excessively, throw it with less layover (more vertical). Alternately, you can remove dihedral by heating and bending the arms.

If the boomerang lands to the left: throw more off of the wind or add a little undercutting to the leading edge of the throwing arm. If the boomerang lands consistently to the right: throw more into the wind. If the boomerang consistently lands in front of you, undercut the leading edge of the trailing arm.

PAINTING

The boomerang needs to be sanded smooth with medium, fine, and extra fine grit sand paper. Several light coats of a clear enamel or polyurethane will protect the boomerang and give it a very nice finish. Ballpoint pens and markers are excellent for drawing designs. Spray painting tends to produce a better finish than brushing.

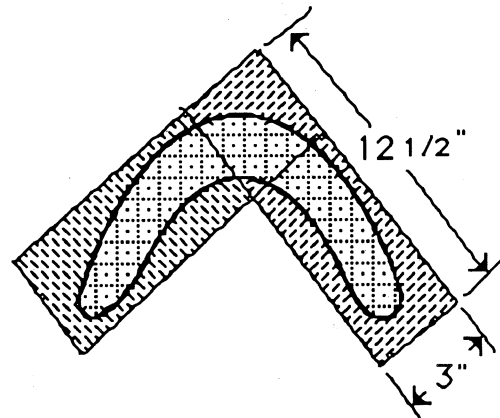


Figure 2 - Layout of planform on Hardwood Boards

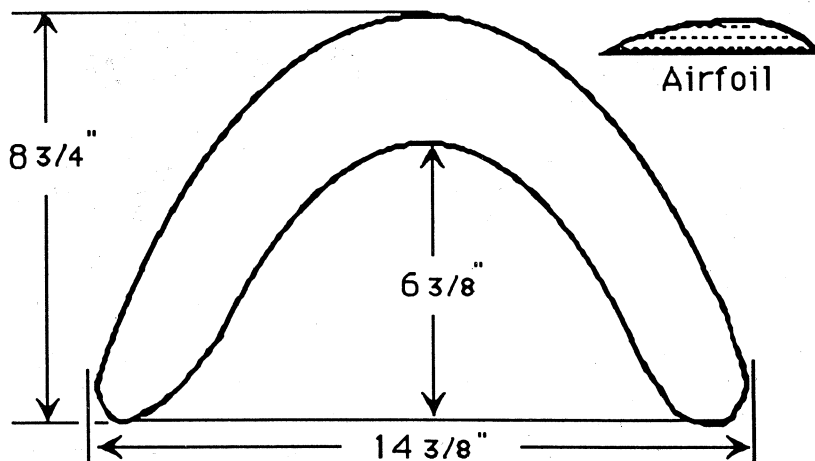


Figure 1 - Kangaroo Boomerang by Melvin Wallace

THANK YOU, FRIENDS



By Matthias Giesenschlag

It has been quite some time ago that we (my girl-friend and I) returned from the States to Germany. All the "boomerang-connections" helped us a lot, maybe it's possible to say "THANK YOU" to all the friends we've made on this trip thru your continent by saying "THANKS" in the next issue of MHR.

We came into the States in the middle of August and after a few days in Virginia we first visited with Al Gerhards, still a "boomerang-grandmaster" even if his active days are over.

Then we visited Garry Lamothe, who not only managed to organize the famous "Pinto Station-wagon" for our trip, but also introduced us to the boom-team of tomorrow - "Team Webtown", to the Northampton brewery, to the local pubs, and and and . . .

Garry is not only a boomerang enthusiast and a great ambassador for this sport, but also a very kind person and in the end we became real good friends. We had planned to stay 2 days and finally stayed two weeks in Massachusetts.

Through Canada and the North of the States we finally came to the West Coast, where another boomerang "crack", Doug DuFresne, helped us to find our way along the West Coast and of course we took place in his "final fling tournament". Again we found out, that boomerangs are a good opportunity to get in contact with other people - there in Portland for example was: Roger Perry from

Australia (mothers lock away your daughters !!!) who will probably visit us next year on a European trip; Dean Kelly who introduced us to the real good American beer, Anchor Steam; Tom Peterson, the West coast MTA man from the Portland area; Team Gel members from Olympia who had an absolute fantastic performance on that tournament!!!

Afterwards, we made it down to San Francisco to visit Dennis Joyce's cousin, a real awesome man (I guess like all those "Joyce-boomers"). Then it was down to a tournament with Leni Barker in Sonora.

Finally we had to leave the car somewhere on the West coast. First, we thought about giving it in the grab bag at a boomerang tournament as a prize. I guess that would have made us famous. But then we decided to leave it with Dennis' cousin Robert, because he offered us a lift to the airport!

Back on the East coast again, we had a final world class boomerang meeting with Jim Jordan, John Koehler, Dennis Joyce, Mike Forrester, and Garry Lamothe.

Up to this year, I had to learn everything I know about boomerangs from myself. I never had a teacher or anyone to show me some "inside tricks", therefore it was a great experience for me to get together with people who are absolutely "world class" and who shared their knowledge with me - Fantastic!

It was an unforgettable 8 week trip, and I doubt that without these boomerang connections if we could have made so many friends on our trip. I'm only hoping that I can return a little of that hospitality some day when US boomers come over to Hamburg. Garry and Doug have already promised to come!

Garry was working on me to become a USBA member, and it wasn't hard work to convince me! I just mailed a letter with the money to Tom Tuckerman. I really think a boomerang newsletter, like MHR, is an excellent way to give information on what's happening to another part of the world.

And who knows, perhaps I can make it to the USA again next year, perhaps to the "Team Cup"? I was speaking with Doug DuFresne about this possibility on the phone. I don't know about whether I can Qualify for the German team. Doug said that there is a possibility that I may qualify for a U.S. team because of my U.S. rating. Maybe he was joking, but who knows. . .

WHEN WILL IT END

By Jim Mayfield

If you have been involved in boomeranging for long, you may have asked yourself this question. Your wives and girlfriends certainly have. After six years of 'ranging I still ask myself this question, especially when I'm leaving the field from a particularly long session with bruised and bleeding hands, blown knee, pulled shoulder, and in a complete state of Zen bliss.

If you build these wonderful objects, you may have noticed, after a day of building them, that you can't even carry on an intelligent conversation because your mind is totally absorbed in aerodynamics and weight balancing. You have probably found that trying new designs and different aerodynamics critically impede your social skills because of the obsessive nature of aerodynamic theory. If your social skills are not being hampered by the creation of these flying pieces of wood, then you probably notice your close friends leaving the room when someone mentions the word boomerang. And after you've given your hour long dissertation on the subject, you check your pulse and excuse yourself, wondering "when will it end?".

For me, the joy of this sport comes in building them and in recreational throwing. Throwing with friends near sunset, mountains in the distance, not much can compare with it. I live too far away from everything to compete much, so for me it's throwing for fun. Boomerang dancing is my love. Take a 40 to 70 yard 'rang and get in a groove. Catch and throw in one fluid movement. Never miss a beat, move around the field. Achieve Nirvana!

WHEN WILL IT END? I pray never.

Editor's note: Jim Mayfield is the 1989 USBA Nationals coordinator. He makes a fine line of boomerang products. Ask for them at your boomerang retailer. The Boomerang Man adds: "I believe the Colorado Boomerangs are the best, made for all, 'rangs to be found in the USA today. Fully handcrafted and flight proven. I truly enjoy their beautiful flight and accurate return."

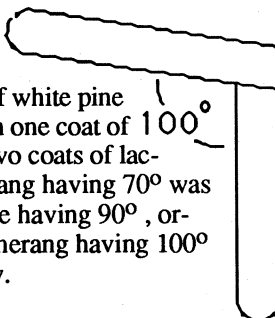
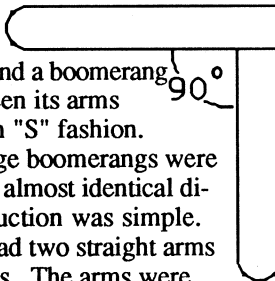
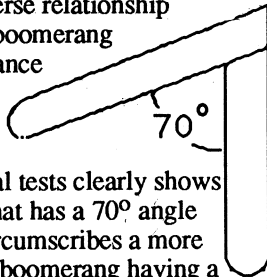
EFFECTS ON FLIGHT PATH BY DIFFERENT ANGLES BETWEEN ARMS:

An Empirical Study by John B. Mauro of Richmond, Virginia

There is a strong indication that the angle between a boomerang's arms, besides having an inverse relationship with the distance a boomerang travels, has significance in the shape of the circumference it makes.

A series of empirical tests clearly shows that a boomerang that has a 70° angle between its arms circumscribes a more circular path than a boomerang having a 90° angle between its arms which circumscribes a circle in the shape of an inverted teardrop, and a boomerang having 100° between its arms which returns in an "S" fashion.

Three short range boomerangs were constructed having almost identical dimensions. Construction was simple. Each boomerang had two straight arms of same dimensions. The arms were glued together at the elbow; trailing arm resting on top of the leading arm. All three boomerangs were made of white pine and each was given one coat of acrylic paint and two coats of lacquer. The boomerang having 70° was painted red; the one having 90°, orange; and the boomerang having 100° was painted yellow.



A fourth boomerang was constructed of the same dimensions having the arms bolted at the elbow so that the angle between the arms could be changed for test purposes. To keep down the added weight, caused by the bolt, it was not painted. It was also constructed out of bass wood because white pine tended to crack when the bolt was tightened sufficiently to hold the arms in place.

Short range boomerangs were used because it is less difficult to recognize a flight path of a boomerang traveling a short distance than one that travels a long distance. The table at the bottom of the page provides the dimensions of each boomerang.

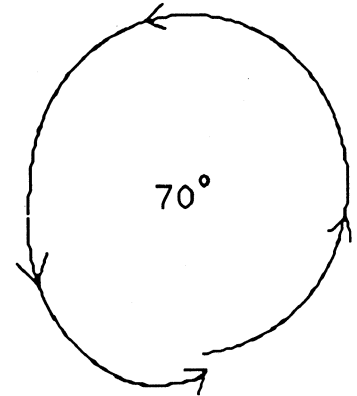
As many dimensions as possible were held constant. Such influences as wind velocity, density of air, etc. that could not be controlled were neutralized by having thousands of launchings in varying types of weather, seasons, type of day, and geographic location in the Richmond area over a two year period.

All four boomerangs were tested one after another so that each was launched under the same atmospheric conditions, location, season, and time of day. An observer was always present to confirm the flight path after each launch.

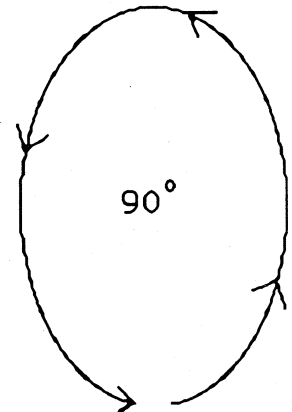
The variable angle boomerang confirmed the differences in flight paths. When its angle was changed to that of one of the three test boomerangs, it behaved in flight as the test boomerang having the same angle. As expected all four boomerangs rose somewhat upon return but each circumscribed a circle of a

different shape.

The 70° angle boomerang consistently flew in an almost perfectly circular path going slightly past the thrower, requiring the thrower to do an about face to catch it.



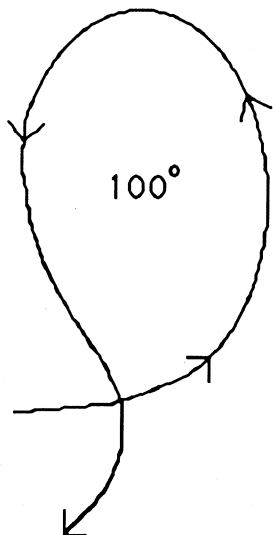
The 90° angle boomerang consistently flew in an inverted tear-like path as illustrated below.



Dimensions of Four Test Boomerangs

Dimension	Red	Orange	Yellow	Variable
Angle	70°	90°	100°	Variable
Weight	18.6 gm	18.5 gm	18.6 gm	19.7 gm
Lead Arm Length	24 cm	24 cm	24 cm	24 cm
Trailing Arm Length	24 cm	24 cm	24 cm	24 cm
Lead Arm Width	3 cm	3 cm	3 cm	3 cm
Trailing Arm Width	3 cm	3 cm	3 cm	3 cm
Leading Arm Thickness	3.5 mm	3.5 mm	3.5 mm	3.5 mm
Trailing Arm Thickness	3.5 mm	3.5 mm	3.5 mm	3.5 mm
Range	11.3 m	11.3 m	11.3 m	11.3+ m

The 100° angle boomerang consistently circumscribed a path similar to an "S" returning in front of the thrower and attempting to go around the thrower from the other side as illustrated below.



Although the data are the result of an empirical test, there is sufficient evidence to warrant serious consideration of them when constructing boomerangs for different purposes. The traditional 90° angle boomerang seems to circumscribe a flight path desirable for most of the current competitive events. Application of Hakansson's* formula on boomerang stability indicates that a 92° angle provides the most flight stability.

*Hakansson, Carolyn Ann. A Thesis Presented to the Division of Mathematics & Natural Sciences. Reed College, 1984.

MORE FAIRY TALES COME TRUE

Jacques Thomas of La Perouse Boomerang Club de France writes to inform us of a friend, Jerome Marche, who threw and caught a sport boomerang (more than 35 cm & 100 grams) from the top of Mont-Blanc in the Alps, at a height of 4,809 meters. Jacques believes this to be a new record for a flight launched from the ground. Can any of the readers top this feat?



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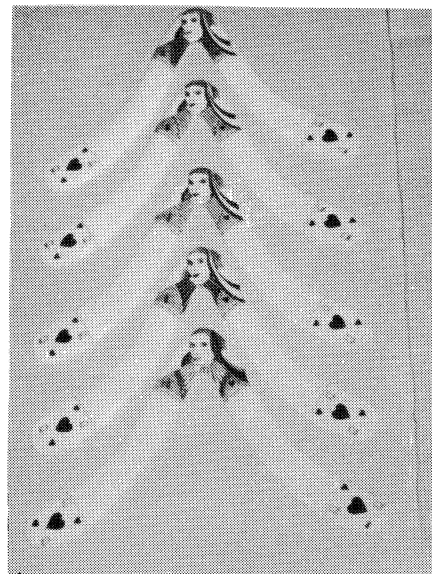
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1989 begins the B'Man's 14th year selling boomerang products. This year B'Man adds a new line of products: Yo-Yos. Priced from \$5, these devices have a remarkable parallel to boomerangs with varied levels of technology and construction materials. Write and ask for a product description. And of course, B'Man carries fine boomerangs such as the "Queen of Hearts" by Rod Jones, pictured below:



CATAGORIZING THE BOOMERANG DILEMMA

by James A. Miller

I am not well known by many of the readers, but I've read a lot about what a boomerang should be. I have made a variety of 'rangs over the past 9 years. I'm not an expert, but who is?

Everybody is criticizing everyone else's definition of a boomerang, so why not simplify everything and compromise a little.

My definition of a boomerang is: "An object, when thrown, without the use of aids/guides, flies outward and returns on it's own". There are various accepted designs: *omegas, super omegas, "V"s, traditionals, hooks, super hooks, "U"s, and the 'all-in-one'*. These models are all commonly recognized by the wide spread boomerang community as **true 'rangs**. Multi-wingers: *cross sticks, pin-wheels, tri sticks, and tri sticks with holes* are known as sacrilege non-'rangs. Kids usually start with these and some adults like them too. There are **Fancies**: *"M", "F", "E", bi-wing, tri-wing, and anything goes* boomerangs. Their ideas can go to infinity and beyond. **MTA** is on much debate. This to me, is

a boomerang, an ultra-ultra-light model. It does come back, again and again, high above the thrower, then it is carried off via air currents. If you want to chase it down . . . go for it. Not me!

In conclusion, there are 4 categories of boomerangs: (1) On an ordinary I.Q. test, you are asked the distance of a line. The answer is: "Twice the distance from the middle to one end". Now we all know what a line is. The guide for a 'rang should be a line that does not cross itself. (2) Anything which is joined at the middle, or at a continuous as a focus point. (3) Okay, if you went to a doughnut shop, you've got two choices: regular doughnuts or Fancies. Both are made from the same ingredients and are true doughnuts, but made a little differently. The same should apply to boomerangs. (4) "MTA"; At any airport there are several types of aeroplanes. You have single/twin engine private craft, passenger multi engine commercial planes/jets, military assault jets, seaplanes, overseas jumbo jets, and now space shuttles. All are true aeroplanes, with different technologies and uses. So what's this got to do with boomerangs? Well, there is still one type I didn't mention. This type doesn't have it's own engine, no massive technological advances, but is one of a simpler challenging type, and is in a 'class' of it's own! Still an aeroplane though . . . A "GLIDER".

Even your own automobile has a class of it's own. You have the Honda Civic, VW Bug, Toyota, Station wagons, Pick-up Trucks, Vans, Busses and Motor homes. These are all automobiles, just a different classification/category! So were all the boomerang types mentioned earlier.

Finally, if categorizing boomerangs for competition is too complex (like the world we live in), then don't make a fuss; **INCLUDE EVERYTHING !!** So . . . What do you think mates? Is this Apples?



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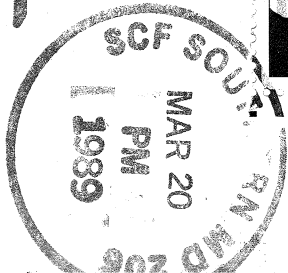
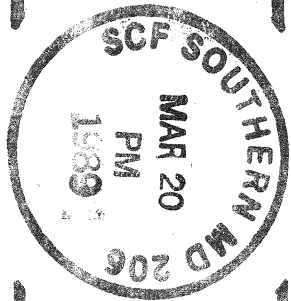
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