

PFDS



FLYER

PITTSBURGH FLYING DISC SOCIETY

SUMMER 1989

PRO TOUR RETURNS TO PITTSBURGH

Hans Kohles and Elaine King won the 1989 Pittsburgh Flying Disc Open, as the CAN-AM series kicked off its ten-city circuit. The second annual tournament featured a sudden-death playoff and paid out a total purse of \$1031.

A field of 85 professional and amateur players from Canada, New York, Ohio, Virginia, Michigan, Maryland, Delaware, Florida, and Pennsylvania converged on the Schenley Park Links for the first PDGA pro tour event in the 'Burgh since 1984. Conditions were cool, cloudy, and dry.

The entire field played two rounds on the 4057-foot course. A cut was made and the top finishers in the Open, Women, and Master divisions played nine more holes with extended tees that measured approximately 3400 feet.

The long holes confirmed Elaine King and Red Whittington as winners in their Women and Master divisions, respectively. King was two under par, had built an eight-stroke lead over runner-up Mina Cordeiro, and gained eleven strokes on eventual third-place finisher Denise Brace after two rounds. King added two more strokes to her lead during the final nine holes and took \$70 and the trophy back home to Canada.

Pittsburgh pro Whittington was -16 after 36 holes and lead the Masters by eight strokes due in part to a searing second round of 43, one of the best rounds of the day. Doug Thompson played the best final nine holes of the four Masters (29), but still finished seven strokes back. Keith Clark was third, finishing at 135, even par for the 45 holes.

Unlike the Women and Master divisions, the Open title was not decided until the 47th hole of the tournament. After the first two rounds, only six strokes separated the top eleven players. Hans Kohles from Columbus, OH, and Tim Day, who had moved to Pittsburgh two weeks earlier, finished the 36 holes tied at 91, 13 under par. Steve Wisecup, Jeff Skelding, Bob Harris, and Tournament Director Steve Kohman were two off the lead. Brent Hambrick was three back, and Keith Brace (who fired a 43 in his second round) and Jeff Malton were both four off the lead. Kevin Stewart and Tom Robison were both at 96, five strokes more than the leaders.

Leaders Kohles and Day played equal throughout the final nine. The gallery was treated

to two different, yet equivalent, styles of play, as the two golfers played every shot with skill, enthusiasm, and concentration.

The parity between the golfers was clear from their tee shots downhill and across a rolling grassy meadow to the #2 pin 440 feet away. Tall, broad-shouldered and right-handed, Kohles launched his tee shot on a high hyzer arc that landed and stuck ten feet from the basket. A left-handed player whose putting and deadly accurate sidearm shots on the wooded holes made him a co-leader after 36 holes, Day snapped off a backhand roller that contoured the swales and knolls of the fairway and curled to within 15 feet of the hole. Both men made their birdie putts, and neither could find the advantage during the final nine, finishing dead even at 119.

Meanwhile, in the second foursome, Brent Hambrick was making his move. Hambrick, anxious to play his long game strength on the final nine holes, shot a one under 26, two strokes better than anyone else on the extended nine holes, but finishing third at 120, one stroke off the leaders.

After a quick discussion with TD Kohman, Kohles and Day began a sudden death playoff on hole #8, a downhill drive between colonades of tall hardwood trees to a pin guarded by three thick horsechestnut trees. Both Day and Kohles missed putts for birdies.

Hole #9, often called "Huck and Hope" by the locals, was to finally be the point of separation between the two men. Reaching the green from the extended tee is nearly impossible because of a group of eight mature trees that grow on the uphill approach to the pin. Finding a window through the grove is like walking on a city sidewalk without stepping on a crack. Kohles' drive landed safely, but not close enough for a birdie putt. Day's drive, however, struck a big tree at midfairway and left him with a difficult second shot through the grove. He could not find a window to the basket, and his second shot was again rejected by the woods. Kohles' second shot got him close enough to putt for par. Day needed to convert on a forty foot upshot through the trees to stay even, but just couldn't connect. Kohles sank his putt, and won his first PDGA tournament in sudden death.

Continued on page 2

DISC WARS

By J. Gary Dropcho

The flying disc products of Innova-Champion and Lightning appear to be headed, not for a Pole Hole, but for a court of law instead. PFDS Flyer has learned that the two manufacturers will be involved in a legal battle that will test the validity of Innova's patent on the beveled edge disc technology that has revolutionized the distance and accuracy of professional and amateur Disc Golfers. According to Innova-Champion General Manager Tim Selinske, his company sought Preliminary and Permanent Injunction relief as well as monetary damages from two distributors of Lightning products for alleged patent infringement.

"Lightning has been so blatant in its copies of our patented disc design that we are forced to sue to protect our patent," said Selinske.

Innova, which is based in Ontario, CA, holds a 1985 patent for a disc which includes a thick and sharply angled, so-called beveled, rim. According to Selinske, Innova's 1985 patent is considered valid for seventeen years or until proven invalid. Innova's court suit against Discovering the World and Snapper Pierson for distributing the Lightning discs, which also feature a beveled rim, is based on statutes stipulating that anyone making, selling, or buying a patent-infringing product is in violation of patent law.

The suit was recently settled out of court with the agreement that Discovering the World and Snapper Pierson would: 1) discontinue selling certain Lightning products; 2) pay Innova a retroactive royalty for certain Lightning discs sold; and 3) return certain Lightning inventory to the manufacturer.

Discovering the World owner Dan Mangone said that his company admitted infringement to avoid the cost and hassle of a lawsuit.

"It is too bad that Innova went after the distributors. We were dragged into this and didn't like it," said Mangone, whose company is based in Southern California. "We retail discs and feel that Innova handled this in an irresponsible fashion. Their problem is with Lightning

Continued on Page 2

PDGA from page 1

At the cookout at the Vietnam Veterans Pavilion, Hans was awarded the Open trophy and \$200 first place prize money. Tim earned \$130 for second place, and Brent Hambrick took home \$100 for his third place finish, as well as an Innova-donated Discatcher pole hole for winning the putting contest.

Trophies, two sets of Hi-Tech discs (donated by Disc Golf Association), and Schenley Park commemorative discs were awarded to winners and runners-up in the Advanced, and Amateur Men and Amateur Women divisions. J. Gary Dropcho, Stevo Prime, and Lynn Giroux won those divisions respectively. A total of 34 advanced and amateur players competed in the tournament.

Citiparks and the Pittsburgh Flying Disc Society sponsored the tournament. Radio station Magic 97 provided music and entertainment with their Magic Bus.

1989 Pittsburgh Flying Disc Open box score

Schenley Park, PGH, PA 4/15/89
39 Open, 5 Open W, 7 Master, 6 Advanced,
23 Amateur M, 5 Amateur W, Purse \$1031

OPEN	\$\$\$
H. Kohles	45 46 28 119 200
T. Day	44 47 28 119 130
B. Hambrick	47 47 26 120 100
S. Wisecup	44 49 28 121 80
J. Skelding	48 45 29 122 70
B. Harris	47 46 30 123 60
Keith Brace	52 43 29 124 45
K. Stewart	48 48 28 124 45
T. Robison	51 45 30 126 17
S. Kohman	48 45 33 126 17
J. Malton	47 48 31 126 17
D. Sangermano	46 50 31 127
J. Graham	47 49 33 129
D. Tomaszewski	47 50 97
M. Simone	52 46 98
M. Sullivan	48 50 98
D. Wood	52 47 99
T. Kady	52 47 99
T. Strelav	48 51 99
G. Utech	49 51 100
D. Bamed	52 49 101
P. Burak	51 50 101
D. Dahlman	52 50 102
D. Kim	48 55 103
M. Washek	52 51 103
J. Baggs	51 53 104
J. Lesniewski	52 52 104
D. Crouse	52 52 104
T. Aten	54 51 105
A. Fankhouser	53 52 105
G. Hulterman	58 48 106
D. Berman	57 50 107
E. Vandenberg	52 55 107
J. Cooksey	53 54 107
S. Cull	53 54 107
B. Young	55 55 110
J. Pacinelli	57 55 112
L. Jensen	58 55 113
B. Larkin	58 58 116
OPEN WOMEN	
E. King	54 52 31 137 70
M. Cordeiro	57 57 33 147 30
D. Brace	60 57 38 155
M. Proud	63 59 39 161
C. Strelav	61 67 128
OPEN MASTERS	
R. Whittington	49 43 30 122 90
D. Thompson	48 52 29 129 50
K. Clark	49 50 36 135
B. Blakely	56 48 32 136
Doc Tomaszewski	55 50 105

S. Hoffman	59	52	111
D. Gompf	56	57	113
ADVANCED			
G. Dropcho	44	51	95 *
P. Mullins	53	51	104 10
B. Moore	50	55	105
D. Bikerman	55	51	106
M. Walker	56	53	109
M. O'Keefe	57	52	109
AMATEUR WOMEN			
L. Giroux	61	57	118
D. Shearer	63	56	119
J. Boysza	63	64	127
A. Fleming	66	69	135
N. Goodwin	81	78	159
AMATEUR MEN			
S. Prime	52	50	102
Doug Opiela	55	52	107
P. Groszkiewicz	54	54	108
R. Rogers	54	55	109
Don Opiela	54	56	110
D. Campbell	55	56	111
S. Dodge	59	53	112
M. Crouse	56	58	114
M. Novara	59	55	114
J. Boller	61	54	115
Karl Brace	59	57	116
T. Arison	60	59	119
J. Folga	63	58	121
M. Linden	59	62	121
L. Schwadron	66	59	125
B. Priestley	63	63	126
M. Kaylor	64	62	126
J. Gargas	66	60	126
T. Kaylor	75	66	141

* Did not accept prize money

COURT CASE from page 1

and not Discovering the World."

Selinske would not comment on why Innova did not sue Lightning directly in the patent case, but Steve Howle of the Dallas, Texas based Lightning Discs believe that Innova "bullied" his two biggest dealers in Southern California. Howle said that he offered to foot the legal bill for Discovering the World and Pierson's defense, but that they declined his offer, wanting to avoid the legal hassle of a court suit.

"My position is that Lightning discs do not infringe on Innova's patent because the patent isn't valid. Lightning is preparing a vigorous legal response in the federal courts that will get at the real issue here," Howle said. "Why did Innova wait four years before starting to mess around with me and my distributors? They started this, and they will have a battle. It won't be over before Christmas and they will have egg on their face."

Howle did not want to talk specifically about the action that his company will take, but said that in order for Innova's patent to be valid, all five points of the patent claim must be true. Howle said that at least one of those claims cannot be substantiated. Howle also said that beveled edge discs were available in the U.S., Sweden, and Yugoslavia at least six years prior to Innova's patent.

Lightning Discs did not patent their beveled edge disc, first introduced as the P-38 Lightning in October 1985, because Howle thought that the wedge-shaped rim was in the "public domain."

Innova would not comment on why it did not name the distributors of other beveled edge disc manufacturers, such as Michigan-based Discraft,

PFDS MAILBOX

Dear PFDS,

Just got my winter issue of the PFDS flyer and I wanted to take a moment to thank John Hunt, Steve Kohman and all the people involved in bringing a disc golf course to the city of Pittsburgh.

We've come a long way from the old "garbage can" course at Mt. Lebanon Park.

I was sorry to hear that I missed the inaugural tournament, but I'll see you all for the PGH Open on April 15th. Until then, keep up the good work and may all your putts be birdies!!!

Brennan Larkin
Tucson, AZ

Dear PFDS,

On behalf of the Division of Health and Physical Education, I want to thank you for all your efforts in conducting the "Flying Disc" workshop at Minadeo Elementary School on March 14, 1989.

Your organization, knowledge of the subject, and personal characteristics were of the highest quality. In addition to your presentation, which was well received by attending teachers, we were most appreciative for the materials that were made available for participants.

Enclosed are copies of the teacher evaluations from the workshop.

Once again, thank you very much for your cooperation and sincerity concerning your workshop presentation.

Sincerely,
Marilyn Barnett
Pittsburgh Public School

The PFDS FLYER is a quarterly publication of the Pittsburgh Flying Disc Society. PFDS is committed to the promotion of fun through flying disc sports and games.

Editors: J. Gary Dropcho and Teri Breier
Contributors: Andy Borinstein, Mark Licata, Todd Williams, Red Whittington
Art: Joe Enck
Printing: First Impression Printing

We want your input. Send us your news releases, tournament schedules and results, advertisements, letters, articles, photos, cartoons, graphics, and minis. We reserve the right to edit or reject all submissions.

Send to: PFDS FLYER 1818 Morrell Street, PGH, PA 15212. 412-734-0321. Deadline for next issue is August 12. © 1989 Pittsburgh Flying Disc Society. Newsletter editors: feel free to reprint anything herein. Please cite PFDS FLYER as your source. Thanks.

in their original lawsuit. Selinske did say that the beveled edge 91 Mold disc made by Wham-o and the Hi-Tech golf discs made by the Disc Golf Association are done under a licensed arrangement between Innova and those manufacturers.



THE ULTIMATE

WHAT HAPPENED TO THE 80-MOLD?

By Mark Licata

I never got a chance to play with a Wham-O 80-mold disc. My first tournament was the Purchase (now Nisely) Cup in 1984, and the disc of the time was the 80E (Made in USA). The 81E was shunned, and the 82E was a rarity. People seemed satisfied with the 80E until early 1987, when something about the disc changed. This, coupled with the expiration of Wham-O's patent on flight rings, gave Discraft the opportunity to gain market share in Ultimate.

Now every Ultimate Players Association (UPA) newsletter has at least one letter promoting Discraft or defending Wham-O. The most recent issue showed 43% of players who responded to a survey prefer Wham-O, while 42% of the respondents like Discraft. The issue has caused much whining at tournaments. Discraft support seems rooted in the West, South, and Central regions, while Wham-O enjoys support in the Northeast and Mid-Atlantic. Frisbees are still used at UPA-sponsored tournaments however, making them the unofficial 'official' discs of the UPA.

Why are people so attached to Wham-O? Even Frisbee supporters admit that the quality of the 80E isn't what it used to be. Some say that the Discraft Ultrastar is more stable, while the Wham-O 80E has more "touch." Oldtimers who prefer Wham-O won't give up the touch in favor of the stability of Discraft. If you ask them about the quality of the present Wham-O product they will inevitably lament; "What ever happened to the old 80-mold?"

We interviewed Dan "Stork" Roddick, a marketing exec for Wham-O to find out. Dan won several World Frisbee Championships in disc sports and is a hall of fame kind of guy. "The 80-mold was first introduced in the late 70's. In the 1977 World Championships, both World Class and 80-mold discs were stamped with the tourney logo. At the 1978 Nationals only the 80-mold was stamped," explained Dan. As the demand for sport discs increased, Wham-O built an extra production tool: the 81 mold. This tool was not an exact copy of the 80 mold; it had more sloped shoulders than the original 80 mold and never gained acceptance due to a tendency to turn over in flight.

In 1980, the original 80-mold was modified so that all the raised lettering was on the top side of the disc. Before this modification, freestylers had to shave the raised letters from the underside of the flight plate in order to nail delay. This 80C version was used at the 1980 World Championships. "It had a raised lip on the top for freestyling that was unpopular in Ultimate, so it was modified

again to the 80E in 1981," commented Dan. In 1984, the tool was changed to read "Made in Mexico" so that production could be moved south of the border.

After modification, the 80E was used briefly in the USA, despite the "Made in Mexico" label, and then moved to Mexico where it now resides. While produced in Mexico, the 80E is injected with the same plastic feedstock as the ever-popular "fastback" disc and several other models. Wham-O now has little control over the materials used for producing the 80E, and to move the tool back to the USA would be expensive because of modifications that would be necessary.

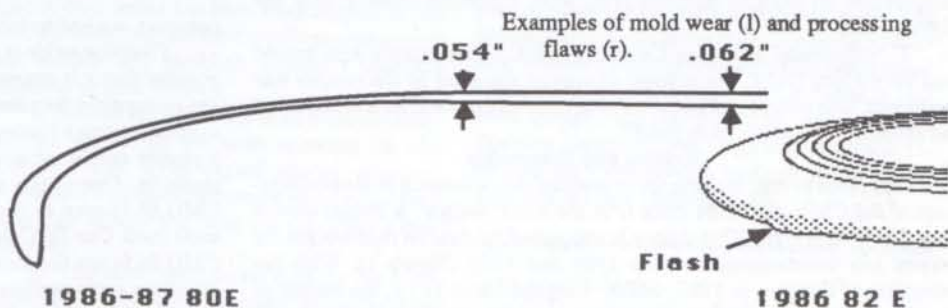
Where did the 82E come from? Stork speaks: "It was built soon after the 81E, but sat on the shelf until 1982. It was designated for specialty products and used for several UPA-sponsored tournaments." Discovering the World Inc., a disc retail company that sell Frisbee as well as Ultrastar discs, produces specialty Frisbees under license from Wham-O. According to Discovering the World's Dan Mangone, "Wham-O allows us to try new materials and processes with the 82E mold. We are fine tuning the 82E for use in the ultimate sport market." As this article goes to press, Wham-O and Discovering the World are introducing the "U-Max" version of the 82E.

"I felt that it would be best to make nothing other than a good 165 g (80 mold)" said Dan Roddick when asked about the U-Max. He also

expressed respect for Jim Kenner of Discraft; "He makes a good product, but it's not in our interest to copy it. The U-Max is flat and firm, and will be a useful addition to our 165g family".

So the 80-mold is still with us, although modified, in the present 80E mold. Why doesn't it perform like the old 80-mold? Molds, like anything else, wear out. They have to be repaired and resurfaced every so often, and this changes them slightly. There are other factors too, like the method used to inject the plastic into the mold (processing), or the type of plastic and fillers used. Changing these factors can have as much of an effect on the performance of a disc as the mold (see diagram), as anyone who received a "domed" 82E last fall can attest. Wham-O was experimenting with a stiffer plastic then, and the stiffer material had a different shrinkage factor than the old plastic causing the disc to dome when it released from the mold.

Last year we began a study to find out what caused the loss of quality in the Wham-O 80E disc. The 1986 CMU disc was picked as an example of a "good" disc, and the 1987 Mars disc was chosen as the "bad" one. Why? Nine out of ten opposing teams accepted the CMU 1986 to pull with, while nine out of ten threw the Mars 1987 back in our face. The study was carried out with the assistance of Wham-O, Discovering the World, and Dow Chemical who supplies polyethylene to Wham-O. My thanks go to Dan Roddick, Dan Mangone, and Dick Morrison (Wham-O research and development).



1986 CMU VS. 1987 MARS : A STUDY TO DETERMINE WHAT PROPERTIES AFFECT THE QUALITY OF MODEL 80E DISCS.

Abstract

This study examines the difference in several physical properties of two low-density polyethylene (LDPE) samples. Both samples are injection molded model 80E flying discs produced by Wham-O Inc. The MFR and average weights of the samples were similar, but the CMU 86 had a higher pigment loading and % crystallinity. These properties could influence the rigidity of the disc and ultimately change it's performance characteristics.

80E-MOLD COMPARATIVE DISC STUDY

Introduction

The quality of discs used in Ultimate is currently a controversial subject. Discs manufactured by Wham-O in 1987 were generally considered to be of lesser quality than previous years. At the same time a competitor, Discraft, introduced discs that gained popularity due to their high stability and rigidity. Ultimate players are now divided between the two suppliers.

This paper is written to help players better understand both the technology used to make sport discs and the factors that influence the quality of the disc. I just want to say one word to you: plastic.

Just as the two metals gold and iron are different, so does each type of plastic have unique properties. Wham-O and Discraft use a common plastic, polyethylene (PE) for Ultimate sport discs. PE is everywhere, from garbage bags to Tupperware to artificial hips. PE is a simple molecule: a string of carbon atoms saturated with hydrogen atoms. It has the same basic structure as methane (natural gas — 1 carbon atom long), butane (in your lighter — 4 carbons), or octane (gasoline — 8 carbons). Wax has the same structure, but it is only hundreds of carbons long. PE can be nearly a million carbons long.

PE can also have branches, and these branches effect its density. The Wham-O HDX disc uses a high density polyethylene (HDPE) that has few branches so it can pack together more tightly. Our data shows that Discraft may use a mixture of low density (LD) and linear low density (LLD) PE, while we know that Wham-O uses just LDPE for a standard disc.

Most tournament discs are white, and they are colored by adding titanium oxide or other pigments. These pigments and other fillers can influence the properties of the plastic. Golf discs use a clay filler to add density. This filler makes them much stiffer, and more brittle.

Probably the least understood factor in the performance of a disc is the method in which it is molded. Injection molding is a complex process where plastic pellets are melted in a barrel and injected under high pressures into a mold. The temperature of the melt or the mold, the injection pressure, the time allowed for the material to dwell in the barrel or for the mold to fill and to cool are just a few of the variables involved in the process.

By measuring certain physical properties of molded discs, we can gain insight into those properties that are critical for good performance. This knowledge could be used to monitor materials and processes so that consistently good discs result.

Experimental

Ten Mars 87 discs and ten CMU 86 discs were weighed. One sample of each disc was sectioned horizontally, and the wall thickness was measured at several intervals. These samples were then pelletized and subjected to several tests:

1. Melt Flow Rate (MFR) condition 190/2.16: This test was used to measure the viscosity of the melted pellets. Viscosity is related to the average chain length of PE.

2. % Filler — Ash method: The samples were heated to 2000 F. At this temperature all organic material (PE) were vaporized leaving only the pigment ash.

3. Differential Scanning Calimetry (DSC): The sample was heated past the melting point. The amount of energy absorbed by the sample was measured. This test measured the melting point of the material and indicated the amount of crystallinity in the PE.

Results and Discussion

One place to start looking for reasons of the difference in the performance of the CMU and Mars discs is in the discs' weight. A lighter disc is bound to be less rigid. This theory is supported by data on disc weight for several key tournaments between 1984 and 1988 (Figure 1). With the exception of Easterns in 1987, which weighed about 177 g, the weight of the 80-mold disc has been steadily decreasing. The College Nationals and Fall Regional discs in 1987 were very low; nearly 165g.

This theory falls apart when we compare the Mars 87 and CMU 86 discs (figure 2). Both discs weigh about 173 g, and had the same variability between samples: plus or minus .5 g. The MFR of both discs were nearly the same, about 50 g/10 min. This data correlates well to that found by Wham-O R&D. We checked with Dow Chemical at this point, to see if the grade of PE purchased by Wham-O changed over this period because different grades could have the same MFR, but different properties. According to Dow, the PE is the same as it ever was: Dowlex 955 polyethylene resin. Since the MFR's are about the same and the grade of polyethylene was

Disc Weights

Figure 1

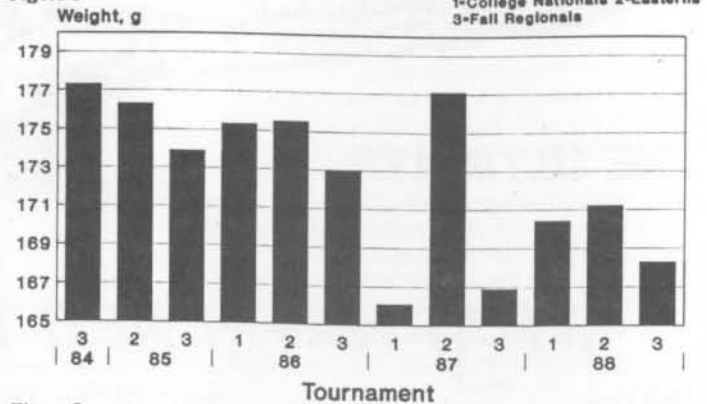


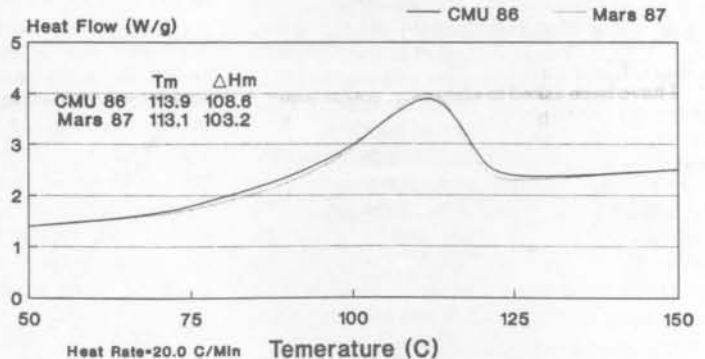
Figure 2

Disc Comparison

Property	CMU 86	Mars 87
Weight, g	173.2 +/- .5	172.5 +/- .5
Melt Flow Rate, g/10 min-190/2.16	52.4	48.2
% Pigment, Ash Method	1.2%	.8%

Figure 3

Data from DSC Analysis



constant, we had to look elsewhere for the difference.

Titanium oxide is popular white pigment for coloring plastics. It is so popular that it is currently in short supply and expensive. Other pigments can be used but they aren't as efficient and need to be added at higher levels to get the same whiteness. Pigments can be added either as a concentrate in a plastic carrier or as a powder fed directly into the injection molding machine. Our results show that there is 50% more inorganic filler in the CMU 86 (figure 4) Testing is still underway to determine what pigments were used. Our DSC data fueled one suspicion: the pigment system in the CMU 86 is not the same as that in the Mars 87 (figure 3). Both discs had about the same melting point: 113.9 for CMU 86, and 113.1 for Mars 87. The heat of melting (Hm) was higher for the CMU 86 however. This is depicted in the DSC scan as a slightly longer leading tail and broader peak for the CMU 86 trace. A higher Hm usually means a greater degree of crystallinity in polyethylene. The type of pigment system in the material could certainly affect this crystallinity, and less crystallinity in polyethylene can result in lower stiffness.

Wham-O R&D confirmed that there is a possibility that the pigment system was changed in 1987. They are conducting some additional (much more expensive) tests and should be finished by late June. To test our theory they will mold discs with the original pigment system and compare them to the present product.

ULTIMATE MAN FROM MARS: KEN SCOTT

By Teri Breier

Ken Scott attended the first Mars Ultimate Classic 11 years ago — as an observer. He wanted to check out this new sport he had heard about. As six predominantly college teams from the Northeast vied for the trophy, the 20-year-old Mars native liked what he saw.

The following year, he entered his own club team in the Classic. Three years later he was running the annual tournament. And this July marks his seventh stint as Tournament Director.

"I've got it down to an art," says Scott. "Somehow or another, things always turn out for the best." He enjoys the challenge of running the tourney, even though it is time-consuming.

For Scott, time is difficult to come by these days. In addition to his full-time job designing electric equipment for Electronic Prototype Development, he has also attended Point Park College part-time for the last four years in pursuit of a B.S. in electrical engineering.

From now on, spare time may be even harder to come by — on June 3rd, Scott became a husband. He and 28-year-old horticulturist Georgine Brown met on a blind date arranged by mutual friends almost two years ago. The rest, as they say, is history.

"Georgine really didn't know quite what to make of my involvement with Ultimate at first,"

Scott recalls. Eventually, she started hanging around games and practices, helping out when she was needed. But, Scott laughs, "she still hasn't learned to play."

Occasionally, Scott tries other disc sports; he has considered "retiring into Disc Golf" when he's ready. It may be sooner than he wishes. "After all, my knees don't work as well as they used to," he admits.

But in the meantime, Scott remains dedicated to the sport that grew up with him. When he began playing Ultimate, the UPA didn't even exist. He remembers games where the rules were made up as they went along. The sport has come a long way since then, because, Scott feels, "people have been good to it."

Scott believes that too many kids don't discover Ultimate until college, when it would greatly benefit the sport if they started earlier. He would like to see more high-school level Ultimate around the country. He has promoted this aspect on his own by encouraging the participation of younger players on his Mars "Gnu Kidds" team, which competes in Summer League as well as in the Mars Classic.

Reflecting on the effect Ultimate has had on his life, Scott half-jokingly concedes, "maybe it's ruined it." Then he continues, "but it's also been the best influence my life could have had."

ULTRATRENDS

By Andy Borinstein

I have been asked to elaborate, and in some cases make predictions on, some important issues, trends and developments concerning the sport of Ultimate.

1. League/Grand Prix. There has been much talk about the formation of an "elite" team league or a system of nationwide Grand Prix tourneys where teams would earn points on the basis of the order of finish in the grand prix tournaments.

These visionary ideas may come to fruition in the next five years. If this is to happen, the UPA has to elect a commissioner and staff to oversee the system. This person has to be most knowledgeable about the strength of the regions and the teams within them. At present, there are only six or eight teams who could or would want to vie with other teams on a national basis. However, a grand prix or league has growth potential because of several existing tournaments that currently attract teams from across the country (ie Boulder and Easterns). These tournaments could become grand prix or league events. Look for some of the elite teams to begin to experiment with a new system on an ad hoc basis.

2. Regional redrawing. This has to happen sooner rather than later. There has not been a change since the UPA was set up ten years ago, and any changes will be vehemently argued like some of the gerrymandered congressional redistricting battles. My suggestion is for the executive committee to expand the National tournament so that representatives from the Pacific Northwest, the Rocky Mountain area and another Central region team somehow find their way to Nationals.

3. Division II Regionals and Nationals. Last fall, the Northeast region held Division II Regionals at the same site as the Division I Regionals and they were exciting and competitive. They should be expanded to all five regions and eventually a National tournament will be formed.

4. Division II College Nationals are inevitable because the smaller college teams will not remain competitive against the larger university teams.

5. Women's Ultimate must continue to expand in order to survive. Older, more established players will soon retire and there are not that many new young players available to fill the gap. Established women players must recruit and train new players. The formation of a women's college national series has been most helpful to the sport's promotion, but men's college teams must help initiate and establish women's Ultimate programs at their schools.

6. Decent playing fields at all National tournaments should be the main criterion for site selection. The UPA organizational structure overlooked this most important point when they made San Diego the host for the 1988 Open Nationals.

7. The same tournament sites for the UPA Nationals should rotate from year to year in order to build up local and national media coverage.

8. Ultimate should be part of all National and Statewide Sports Festivals. The sport has to be part of these programs before we can even begin to think about getting it into the Olympics.

9. The UPA will refuse to accept sponsorship from Coors Beer due to past and, arguably, present politically incorrect positions (ie. union-busting, racism and contra aid).

10. Los Angeles will (finally) begin to win most of its close games and Chicago will (finally)

FIELD SPACE

• High school Ultimate in Pittsburgh has become a reality. Taylor Allderdice High School traveled to a tournament in Philadelphia on May 13, and finished with 2 wins and 1 loss. Team co-captain Albert Robertson led the 'Dice to victories over Westwood HS (13-7) and Princeton Day School (13-0). Columbia HS, where the sport of Ultimate was founded 20 years ago, played the spoiler by defeating Allderdice 13-9. Allderdice trailed 12-3, but put together 6 straight points before Columbia scored the game-ending goal. "We played them tough, but I think with a little more practice we could have won easily," said co-captain Rickki Cleland.

Allderdice is seeking a new coach since Akbar Ormes left the position to clean up oil in Alaska. The team plans to participate in this year's summer league, and win High School Nationals this fall.

Another high school team is being formed in Sewickley with the help of the local YMCA. Other high school students interested in playing Ultimate should contact Nancy McNamee at 421-DISC.

• Carnegie Mellon University's Mr. Yuk qualified for College Nationals for the fourth consecutive year. This makes the Yuksters the only team to have played in the collegiate championship every year since the tournament began. Results were not yet in when we went to press, but hopes were that CMU would win the title that has eluded them.

CMU women competed in their first spring college season ever. The "Steel Garters" lost to eventual champion Towson State Slippery When Wet, 13-14, in the best game of the tourney. Steel Garters beat Penn State Venus, but lost to them in the playoff round. The CMU women also played in a New Players tournament at Penn State and at Ivys during the spring.

• The Pittsburgh Slugs (formerly Crash) finished fourth out of twelve teams in the combined PA/DE/NJ Sectional tourney in Turkey Swamp, NJ. Things looked pretty grim Saturday morning with only six players, but Paul Drake made the clutch phone call to recruit Andy Packel, a CMU player, who was in Philly to visit his 'rents. The turning point came in the fifth (!) game on Saturday, when No Passing Zone employed an unusual strategy. Ahead 7-6 at half, NPZ decided to pull even though they had pulled to start the game. The plan backfired, and Slugs went on to win 13-9, assuring themselves a berth to Regionals on June 3-4 at Cape Henlopen, DE.

form a second team.

11. Sweden will be the first European country to defeat an American Ultimate team, and it may happen this June at Easterns.

12. Edwin "Stick" Dissosway, present Northeast Regional coordinator, may become the first elected UPA official to be impeached due to the loss of field space at UMASS.

Andy Borinstein lives in New York and has played Ultimate in New York and Pennsylvania since 1977. He has been active in the UPA as a sectional coordinator and has written widely on the sport.

FLYING DISC CALENDAR

6/3-4	UPA Open Regionals	DE	A.J./Melissa	302-731-7415
6/3-4	Mt. Kisko Open PDGA	Mt. Kisko, NY	David Jones	914-737-3939
6/3-4	Edgewood Electric Open PDGA	Cincinnati, OH	Kerry Keith	513-662-8601
6/10	Akron Open PDGA	Akron, PA	Merrill Deitweiler	717-394-7044
6/10-11	Hardee's Open PDGA Super T	Baltimore, MD	Steve Alpern	301-377-4845
6/17	Joseph P. Davis Open CANAM #5	Lewiston, NY	Royce Racinowski	716-482-8697
6/24	Dead Dog Woods Open PDGA	French Crk St Pk, PA	Dave Tomaszewski	215-777-6242
6/24	Great Lakes Open CANAM #	Troy, MI	Bob Huston	313-398-0779
6/25	20th Ultimate Anniversary	Maplewood, N.J.	Phil Vlahakis	212-865-3899
7/1-3	12th Mars Ultimate Classic	Hampton Pk, PGH.	Ken Scott	412-625-9083
7/1-2	Flatts Classic IV CANAM # 7	St. Thomas, ONT	Bob Harris	519-633-7830
7/1-2	Duck Golf PDGA	Fairfax Station, VA	Scott Holter	703-425-4271
7/8	Calvert Road Open PDGA	College Park, MD	Rick Connor	301-459-8617
7/14-16	PDGA Natl Amateur Chmps	Laurel Springs, NC	Steve Lambert	704-568-8222
7/22	Utica Open CANAM #8	Utica, MI	Greg Utech	
7/29-30	Rochester Open CANAM #9	Rochester, NY	Royce Racinowski	716-482-8697
8/5-6	10th Ohio St. Chmps PDGA	Dayton, OH	Slate Paul	513-256-0007
8/12	Earl Brewer Open CANAM #10	Grand Rapids, MI	Chuck DeVries	616-455-1233
8/19	PGH Summer Ultimate League	final and picnic	Steve Nueman	412-362-1006
8/19-20	Mixmaster Genderblender and Mid-Atlantic cpts mtg.	Washington, D.C.	Eric Simon	703-892-1279
8/20	2nd Beaver Open PDGA	Kirkwood, DE	Steve Winchester	302-738-4893
8/22-26	PDGA World Championships	Waterloo/ Cedar Falls, IA	DL Redman	319-296-1747
			Dave Hook	319-233-5092
9/2-3	PA State Flying Disc Champ.	Schenley Park, PGH,	J. Gary Dropcho	412-734-0321
9/16	S. Ontario Open PDGA	St. Thomas, ONT,	Bob Harris	519-633-2482
9/30	Sherando Fall Open PDGA	Stephens City, VA	Clark Putman	703-869-3275
10/7-8	College Park 99 PDGA	College Park, MD	Rick Connor	301-459-8617
10/27-29	UPA Natl Chmps	Washington, DC	Eric Simon	703-892-1279

SUMMER'S SEVENTH SEASON

Summer's hottest sport returns to the fields of Pittsburgh on Tuesday, June 13, 1989. Washington Boulevard, Fowler, Kennard, and Hampton High School fields will be visited by suntan fans and horizontal Gnu Kidds, hucking Throbers, or muddy Swine. Likely opponents to these clubs include Regent Square, Sliders, Mr. Bob, and the Oakland Raiders.

The seventh season of summer Ultimate is likely to be expanded by the addition of new, younger teams from Sewickley YMCA, Taylor Allderidge High, and Fox Chapel.

If you plan to play, keep Tuesday and Thursday evenings free until mid-August. At that time, the regular season standings will determine the playoff pairings. A Summer League champion will be determined on the same day as the league picnic, tentatively set for Saturday, August 19.

During the summer, the league recruits, teaches, and generally spreads the glorious gospel of Ultimate. Women players are welcome as most teams recruit and play females as part of the team. Teams captains and experienced players are encouraged to invite newcomers onto their teams, to be patient with those less familiar with the strategies and rules, and to always remember the Spirit of the Game.

For those interested in playing but are not yet lined up with a club, it is not too late. All signups, inquiries, and concerns can be handled by calling League Commissioner Steve Nueman at 362-1006.

WHITTINGTON GETS TWO WINS IN TORONTO

By J. Gary Dropcho

Neither rain nor wind could deter 130 Disc Golfers from their appointed rounds during the Ward's Island Disc Golf Challenge and the Centennial Park Open (CAN-AM tournaments #3 and #4) in Toronto, Canada on May 20 and 21.

Pittsburgh golfers were well represented and successful at the events as Red Whittington won the Master division at both tournaments; Lynn Giroux won the Amateur Women division both days; Steve Kohman finished eighth and in the money on Saturday; and Michael Novara finished fourth in the Amateur Men division on Sunday.

On Saturday, the Ward's Island Disc Golf Challenge hosted sixty players in Open, Open Women, Master, Amateur Men and Amateur Women divisions, and paid out a total of \$865 and over \$500 worth of trophies and prizes. Toronto's Michael Sullivan shot rounds of 45, 44 and a nine-hole playoff round of 29 to win the Open division (and \$220 Canadian) by four strokes. Vancouver's Glen Whitlock (46/47/30) won a sudden-death playoff with John Blakely to finish second. Blakely had the best score in the fog-shrouded and rain-soaked final nine-holes, shooting a 25.

Elaine King (55/58) beat Mina Cordeiro (57/59) by three strokes in the Open Women division.

Master Red Whittington played right as the rain that fell on the golfers almost the entire day. He shot 53/52 to win \$90 and one of the framed and matted photographs of the Toronto skyline that Tournament Director Bob Blakely gave as

trophies. Bob Huston of Detroit (51/55) and Royce Racinowski of Rochester, NY (52/55) finished second and third respectively.

Lynn Giroux shot 69 and 67 to beat Buffalo's Cory Baach (74/74) for the Amateur Women trophy.

Toronto's Philip VanWassenaer shot even par (55/53) for the tournament to win the Amateur Men division. Paul Blair and Blair Zinn finished second and third respectively.

The 5202-foot Ward's Island course was installed in 1980 on one of the islands that lie just off Toronto's Lake Ontario shore. It features Mach I Pole Holes with super heavy chains, flat grassy fairways, coniferous and deciduous trees. OB is marked by the lake on one side and freshwater ponds on the other.

Sunday's Centennial Park Open brought a change in both the course and the weather. The Centennial Park course in suburban Etobicoke is over 5000 feet long, but unlike Ward's Island, features rolling fairways, up and downhill shots, as well as picturesque holes across water hazards. The weather on Sunday was in the eighties and sunny, but gusty winds blew stronger as the day went on making putting on the Mach II-converted heavy chained Pole Holes very difficult. Higher scores in the second round seemed to be the trend for golfers in all of the divisions due to the windy conditions, which locals said were usual for the course.

Over \$900 was paid out to 50 Open Men, Open Women and Advanced players. Thirteen

Continued on back page

THE 1989 CAN-AM SERIES is a ten-city circuit of tournaments designed to encourage travel and disc golf competition in the eastern Great Lakes area. Begun in 1986 by Phil Palumbo and since run by Bob Harris, Rob Laurie and Eric Vandenberg, this year's CAN-AM has added two new events. The series began April 15 in Pittsburgh and concludes August 12 in Grand Rapids. For the first time, all of the events are PDGA sanctioned.

Two (U.S.) dollars are deducted from each player's entry fee to pay for awards to be given out after the final tournament. A player's best five out of ten tournament finishes will be counted. The top Open Women player at each event gets ten points; the 10th place woman gets one point. The Open division, which will be integrated with Master and Advanced players, will be based on a 60-point system.

In the past, the top 10 men and top one or two women have won prize money. CAN-AM hopes to pay out the same in 1989, depending on the amount of money collected. At least, the top woman and top five men will be awarded money and plaques, perhaps at the World Championships in Iowa.

For more information, write or call:
Eric Vandenberg
30 Charles Street West #706
Toronto, Ontario
Canada
M4Y-1R5

DISC GOLF ETIQUETTE IS PART OF THE GAME

By Red Whittington

Courtesy is one of the most important aspects of Disc Golf and is responsible for making Golf an enjoyable and worthwhile experience. The truly great golfers realize that the biggest challenge is not so much the other players as much as the course itself, and the most awesome opponent you will ever face is yourself.

The rules of Disc Golf exist to provide the standard from which all players may compete equally and fairly. Some golfers may feel shackled by so many rules, but if you try to simulate tournament rules and conditions each time you play, you may be pleasantly surprised in how the quality of your game will improve. Remember, sloppy practice breeds sloppy play.

One of the truly unique aspects of golf that I experience in tournament after tournament is the integrity of my "opponents." Whenever a good putt or drive is executed, the group always congratulates the thrower. This spirit of camaraderie and fair play is what makes Disc Golf unique among competitive sports. In the last two tournaments I attended I had the good fortune to sink two aces. Of course, I was elated, but I think some of the other members of my group were more excited than I was.

It is great to win, but what is more important is: How did you play your game? Did you play to your potential? If not, were you able to accept your mistakes like an adult? My advice to those who can't keep their negative emotions to them-

self is perhaps they should take up knitting.

Here I would like to quote from the P.D.G.A. Rules for Disc Golf 1988 Edition:

1.0 COURTESY

1. Players should not produce any distracting noises or any potential visual distractions for other players who are throwing. This includes yelling, freestyling, paddling, slapping chains with discs, slapping tee signs, throwing out of turn, etc.

2. Players should not throw until they are certain that the throw, its flight, or landing will not distract another player.

4. A player who is consistently discourteous may be disqualified under Rule 4.3.

4.3 DISQUALIFICATION

1. A player may be disqualified by the Director only, with no refund of entry fee, for any of the following acts:

a. Unsportsmanlike conduct detrimental to the future and image of the sport, such as: loud cursing, throwing things in anger (other than discs in play), overt rudeness to other players and officials.

b. Willful and overt destruction or abuse of plant life, course hardware or any other property considered part of the golf course.

e. Any willful attempt to circumvent the rules of play.

Other "unwritten" rules of courtesy that should also be followed on the course:

• Players should stand well behind the person who is throwing, allowing them ample room for a run up to their throw.

• All non-throwing players should be out of the thrower's peripheral vision. When a player is putting, other players should be well off to the side of the pole hole to avoid causing a visual distraction.

• Talking, shuffling through leaves, or rummaging through a disc bag while another player is attempting to throw should not be tolerated.

• It is common courtesy not to make comments on another player's disc-in-flight until it has come to rest. Many times have I released what seems to be a good shot when another player has rudely exclaimed "Nice drive!" It seems that whenever that has happened, my disc became a bark-seeking missile. Save your congratulations for when the disc comes to rest.

If discourteous behavior messes up your game, don't hesitate to ask someone to keep quiet or to move out of your visual field. You won't regret it, nor will you be able to blame someone other than yourself for making a bad shot. The most important point is to respect your fellow players and enjoy Disc Golf.

If you would like a copy of "Rules for the sport of Disc Golf," send a check for \$3.00 to: Professional Disc Golf Association, P.O. Box 240363, Memphis, TN 38124-0363

DISC GOLF DISC LTD™

Presents for the first time a real set of Hi Tec Golf Discs™

The D.G.A. in cooperation with Innova Champion Discs has developed a line of almost identical discs based on the "Stingray"™. The discs look the same, feel the same but have different flight paths, indicated on the face of each disc. No more throwing guess work!!!



DRIVER

overstable
(Stingray flight path)
Into the wind max
throw driver



DRIVER

less
overstable
Less wind max
throw driver



DRIVER

almost stable
No wind max throw
Driver



APPROACH

stable to
under stable
Down wind max
throw driver, or all
wind approach



PUTTER

understable
Down wind Heizer
Driver Approach &
the best "flying"
putter we have
ever thrown.
Putts from 50'
fly in!!!

Individual Discs \$8.50 each plus \$2.00 (order by number)

SPECIAL OFFER All 5 Discs for \$36.00 plus \$3.00 postage and handling plus 6% California tax

ORDER YOUR SET NOW & WIN IN '89 WITH HI TECH GOLF DISCS™

© Disc Golf Disc Ltd. '89 • (U.S. Pat # 4568297)

DISC GOLF DISC. LTD. • 4388 A Hill Road, Lakeport, CA 95453 • (707) 263-6304

TORONTO from page 6

amateurs competed for trophies and prizes.

Toronto's Bob Harris shot a 43-hole total of 124 to win the Open division and \$200. Etobicoke pro Dave Chapman finished second (128, \$120), and Columbus, OH Dan Ginnely won a sudden death playoff with Jeff Malton to finish third (129, \$85). Tournament Director Rob Laurie paid out to the top 10 Open finishers.

Elaine King was the lone Open woman. Her two-round score was 121.

The Master's trophy and prize money of \$75 was again won by Red Whittington who shot a 106 for the 36 holes. Bob Huston finished second (108) in as many days, and Roger Dickin shot a 111 to take third.

The Advanced division was captured by Philip VanWassenaer with a 36-hole score of 110, including an ace in his first round. VanWassenaer's hole-in-one was a slightly downhill rocketshot that flew straight as an arrow, cut between the branches of two trees in front of the hole, and banged into the basket over 300 feet away! Philip won his second division of the weekend, and on Sunday walked away with a Mini Pole Hole and \$40 cash first prize. Greg Pinnegar won a sudden-death playoff with Paul Smyth to settle second and third places.

Lynn Giroux again won the Amateur Women division, this day with a 148 total. Cory Baach finished second with a 169. Don Opelia (111), Rick Schmidt (123), Harry Rudolph (126), and Michael Noyara (127) finished first, second, third, and fourth in the Amateur Men division,



CUSTOM PRINTED SPORTSWEAR

- Shirts • Hats • Sweats • Uniforms

4801 Penn Avenue, Pittsburgh, PA 15224

(412) 661-8585

THE WEDNESDAY-NITE-AFTER-WORK DISC GOLF LEAGUE RETURNS! 6 PM AT SCHENLEY DISC GOLF LINKS. PLUS DISC GOLF DOUBLES SUNDAYS AT NOON. BE THERE.

PA STATE FLYING DISC CHAMPIONSHIPS

September 2-3

Schenley Park, Pittsburgh

- PDGA Disc Golf
- Distance
- Accuracy
- MTA
- Freestyle



\$30 Open and Master
\$15 Advanced
\$10 Amateur
\$5 Late fee day of tourney
\$5 Each additional event

SCHENLEY PARK
CENTENNIAL
1889-1989

Make checks payable to:
PFDS
1818 Morrell Street
PGH, PA 15212
Info: Gary Dropcho 412-734-0321

**PFDS
1818 MORRELL STREET
PITTSBURGH PA 15212-1717**

Forwarding and address correction requested

