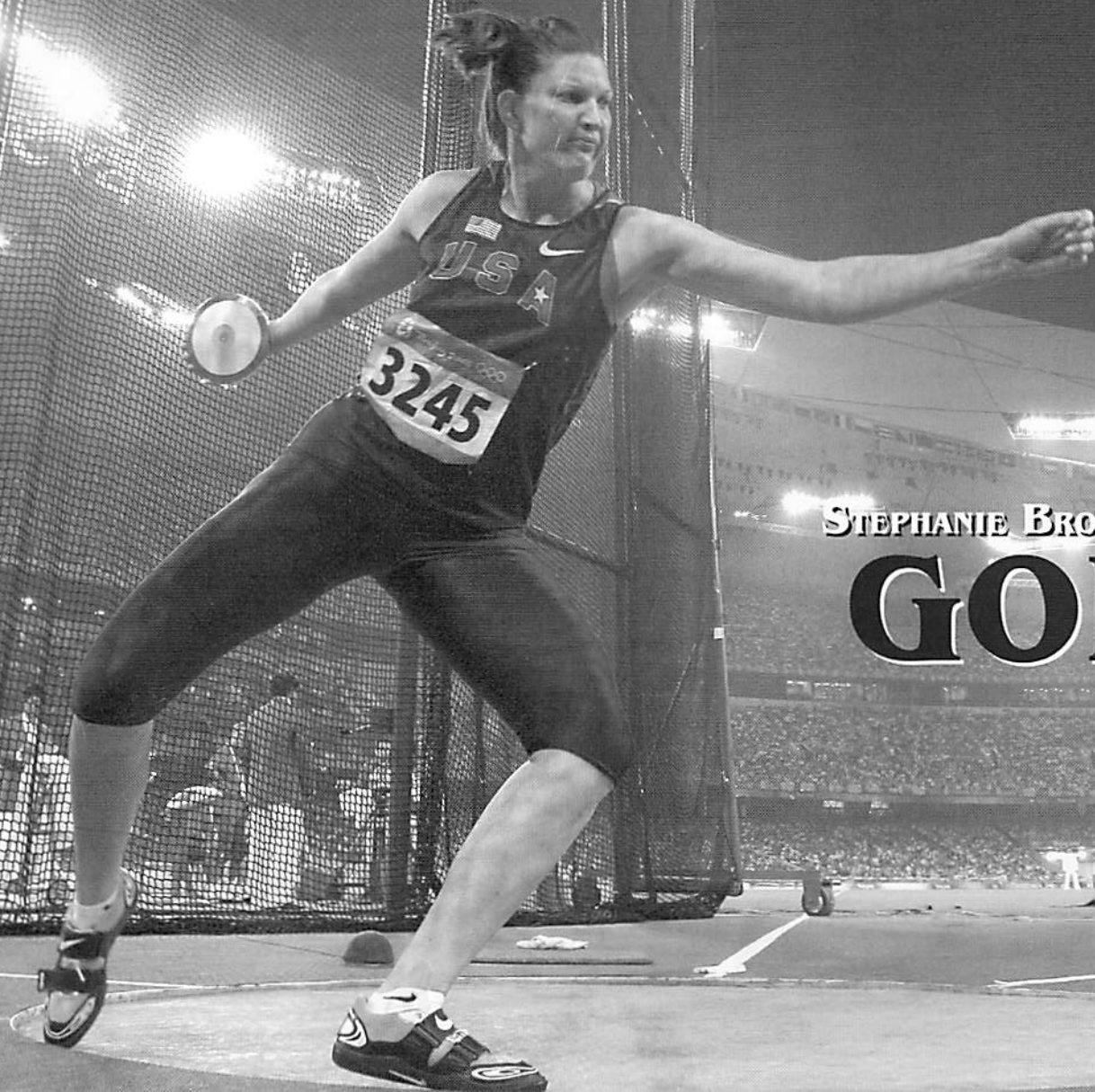


OCTOBER, 2008

LONG & STRONG



STEPHANIE BROWN-TRAFTON IS...

GOLDEN



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Stephanie Brown-Trafton had a golden moment in Beijing.

(Victor Sailer)

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The Bird's Nest came alive during the Opening Ceremonies.

(Victor Sailer)

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Letter From The Editor

RUBBERNECKING

There's nothing to grab your attention on television like the words from the host or news anchor warning the upcoming footage is graphic in nature and may not be suitable for young children.

Do we turn away from the screen? Change the channel?

If you say you do, I'm calling you a bold-faced liar, right here, right now. You're like the rest of us. Admit it.

You turn up the sound and inch closer, because no matter how horrific the sight, human nature draws us to catastrophic images. It's just human nature to gawk. How many traffic jams have you been in where the accident is in the opposite lane, but everyone heading the other way (including myself) has to slow and take in the carnage.

Thus it was for American track fans in Beijing. The center of the sporting universe for the third week of August was exactly twelve hours from the Eastern time zone in the good ole U.S. of A. The actual track and field updates for most of us came via ESPN or other news outlets. The viewing had to wait until primetime, interspersed with other Olympic events.

Watching most Olympic track events was like watching a documentary of some historic event that might have happened decades ago. Just as we knew JFK died from an assassin's bullet and the Allies won the Big One, we were drawn to watch outcomes we already knew, no matter how unknowing NBC host Bob Costas pretended to be. To view the events, no matter how belated, filled in the how's and why's of the Olympiad.

And the news that streamed out of Beijing that preceded the televised coverage was unrelentingly bad for fans of the star-studded star-spangled runners, throwers and jumpers, particularly early in the week. Yes, there were golden moments for the Americans. But there was a lot of bitter to go with the sweet.

It started with the men's shot, where all notions of an American dream team sweep was dispatched before the final three throws. Only a clutch effort by the much-maligned Christian Cantwell got the Americans on the podium.

And from there, there was consistent disappointment in event-after-event, day-after-day. For every Stephanie Brown-Trafton miracle moment, there were no finals qualifiers in multiple events.

For every U.S. sweep in the flat 400m and 400m, there was a Jamaican sweep of all the short sprint golds, both male and female, including a sweep of the women's 100m. Or Lolo

Jones heartbreaking crash and burn just two hurdles away from immortality. And the Americans, of both genders, dropping the stick in the 400M relay qualifying.

As the week progressed, I became gun shy about checking ESPN.com, lest I find that some other shocking disappointment had just occurred in the Bird's Nest.

But damned if I didn't tune into NBC each evening to watch the carnage I already knew to be fact.

Am I being a bit harsh? The 23 medals won by the team matches the medal tally won in Atlanta in 1996 and exceeds the 17 won in Sydney. But accounting can be as much art as science. I consider myself a glass half-full type, but for some reason, the disappointments are what lingered with me. And I was not alone in my assessment. *The Ring* (www.effortlessthrow.org) was abuzz with theories about, and scorn for, U.S. throwers. Trafton-Brown drew praise, but she generated relatively little commentary compared to the five throwing events where Team USA failed to advance a single athlete.

The sense of underachievement was palpable in Beijing from none other than newly-minted USATF President Doug Logan, who blogged on the subject before the track and field competition had yet to conclude.

Post-Olympiad, Logan promised a review of the High Performance program. "I wondered why we appeared not to be generating peak performances for the year, whereas others, whether in our sport or other disciplines, were achieving PRs and world records," blogged Logan. "I questioned whether the areas in which we seemed to underperform were the result of a fluke and bad luck, or if they were reflective of a systemic problem."

The lack of American throws success can be witnessed in these pages. As I have with the last two Olympiads, I reached out to the throwers (mostly American, but Europeans also) whom I have some acquaintance with, and asked for their free-form thoughts of Beijing. I asked both before and after the Games, and received a meager two responses. Uno. Dos.

They were in the midst of the wreckage that we witnessed. And apparently they were in no hurry to relive the carnage that we couldn't help but watch. *L&S*



Glenn Thompson

GOLDEN MOMENTS

BY GLENN THOMPSON

The Beijing Olympics offered a plethora of subplots.

There was no shortage of televised, internet and print coverage of the stories behind the Games. The Olympiad was to be an international coming-out party for a country of 1.3 billion people, as though they could be missed. The Games were going to be about the repression of human rights and dissent internally by the Communist government. The forced relocation/homelessness of Beijing residents in favor of venue construction. Or suppression of Tibet or the government's tacit support of the genocide in Darfur. These Games were to be about the persistent air pollution that many feared would alter endurance competitions.

But ultimately, this Olympiad was about the athletes and their competitions. Everything else faded to the periphery, as these were the Games of Michael Phelps and Usain Bolt.

And it was much the same for the throwing events. Unlike Athens, where three champions were unseated for doping offenses, the only such drama in Beijing took place in Russia (see box) prior to the Games.

The throws in Beijing were mano-a-mano competition. They encompassed the full athletic spectrum, including stunning upsets, dominant performances, emerging talents, fading stars, national rivalries, and just a touch of high drama.

MEN SHOT PUT

QUALIFYING

Qualifying offered only one serious surprise. In Group A, 26 year-old Pole Tomasz Majewski built on his World Indoor bronze with a 21.04m opener and new personal best. World Indoor champion Christian Cantwell put 20.48 (though he needed two attempts) for second place behind the Pole in Group A, while World outdoor champion Reese Hoffa was fourth in that same group with 20.41m. Canada's Dylan Armstrong, with a first round put of 20.43m, was the other automatic qualifier in fifth place overall, ahead of Hoffa in Group A.

Adam Nelson topped the Group B qualifiers at 20.56m. 2003 World champion Andrei Mikhnevich of Belarus, who recently improved his PR to 22m, hit 20.48m on his second throw to take second place in Group B behind Nelson.

Of the remaining six qualifiers who made the final, defending Olympic champion Yuriy Bilonog of Ukraine had a best of 20.16m, while Rutger Smith of the Netherlands, fourth at last year's World champs, had 20.13m.

Other qualifiers included two other Belarussians, Pavel Lyzhyn (20.36m) and Yuriy Bialou (20.12m), and two Russians, Pavel Sofin (20.29m) and Ivan Yushkov (20.02m).

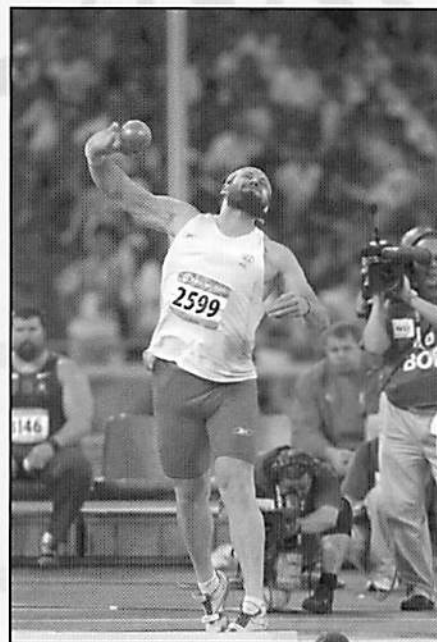
There were two notable non-qualifiers. German Peter Sack, who had registered a 21.19m this season, failed to make the final (13th overall) with a 20.01m effort. Denmark's Joachim Olsen, the bronze medalist in Athens, had no more than a 19.74m (season's best) to offer.

FINAL

Tomasz Majewski was barely on the radar of most shot put cognoscenti the last two years. This competition was supposed to be (A) a coronation of the American Big Three (in any order variation), or (B) a referendum on the glide versus the spin in big competitions. Majewski, a prototypical European glider, along with freshly-minted 22-meter putter Andrei Miknevich, posed serious threats to the U.S. triumvirate, which had posted eight of the top 10 throws in the world this season.

Majewski, throwing second from last in the prelims, delivered a 20.80m opener to wrest the leader from fellow-gliders Belarus' 2003 World champion Miknevich's (20.73) and Yuri Bilonog (20.63m). Just off the podium was Canadian Dylan Armstrong (20.62m).

The American contingent's openers were somewhat ominous, with two fouls (Reese Hoffa and Adam Nelson) and a solid, if not spectacular, 20.39m from Christian Cantwell.



Majewski

Tentativeness began to give way in the second round as Miknevich (21.05m) and Armstrong (21.04m) broke the 21-meter barrier, and Cantwell came (20.98m) to move to third place. Hoffa could muster only a 19.81m.

There were four fouls in the round, including a second for Nelson.

In the third round Pavel Lyzhyn leapt into medal contention blasting a personal best 20.98 to pull even with Cantwell and Majewski stretched out to 21.21m to retake the lead.

Hoffa, still looking for his groove, notched a 20.53m effort to stave off an early exit. Nelson would have no such relief, as a foot foul officially ended his quest for Olympic gold dramatically and prematurely.

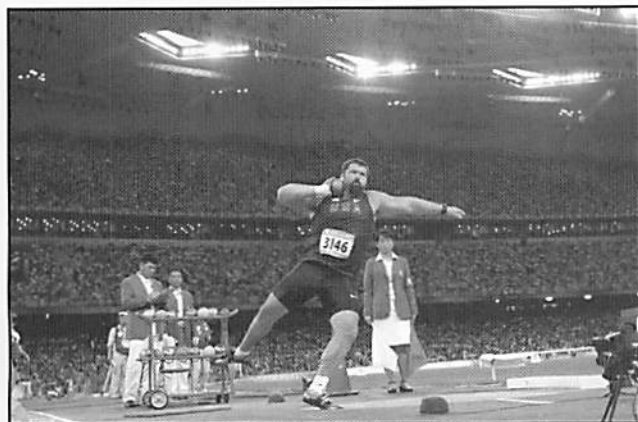
"I'm not going to make any excuses," said Nelson, who had been battling a rib injury. "It's inexcusable. This is what I do for a living. To not make a final after seven years of making finals, it's inexcusable. I was just off today. It was unfortunate. Ultimately I did my best. I was really lucky to make the final and make the second round of qualifying."

The finals rolled on without Rutger Smith, Yury Bialou, Ivan Yushkov and Nelson.

There was no positional movement in the fourth round. Lyzhyn notched a second consecutive 20.98m in the stanza, but Majewski stretched his lead with a clutch personal best of 21.51m to end the round.

The fifth round saw no movement, leaving one last attempt for the field to grab Olympic glory.

There were five sixth round fouls, including Hoffa, who was relegated to a seventh place finish. Cantwell produced a 21.09m finale to edge past Miknevich for silver. Miknevich made a game effort with his last attempt, but his 20.93m toss left him in the bronze position. The already victorious Majewski closed the competition with a 20.44m.



Cantwell

Majewski had come to the Games with a still recent personal best of PB of 20.97m in London (July 25). The 26-year-old announced his Olympic presence earlier in the year at the World Indoors (bronze) Valencia, Spain, with a national record of 20.93.

Majewski had the kind of day any athlete dreams of. Personal bests in qualifying and the final, and Olympic gold. Majewski's victory mirrored that of the only other Polish Olympic shot winner, Wladyslaw Komar (1972), who upset more celebrate foes from the USA and East Germany.

In Athens 2004, he had been a victim of the qualifying rounds (19.55).

Majewski said, "My expectation on the Olympics was only among the top eight, or the fifth at the best. "I was relieved a lot when I saw only two Americans were in the finals," the Pole said.

"Being a medalist is good, no matter what it is," said Miknevich. "But of course I came to Beijing for the gold medal."

"We knew it was 50-50 (to sweep). Anything can happen and we saw that," Hoffa said. "When you call us the Dream Team, we're human and we're susceptible to mistakes and it showed. I'm disappointed but I'm not going to beat myself up over this. I don't look at this as a failure. It's just a competition. I wanted to get it done. It sucks that I didn't."

"I just wasn't executing," Hoffa continued. "I don't know what I needed to do. It wasn't like Tomasz's mark was out of my range. It wasn't meant to be. My goal now is to go and prepare for (next year's worlds in) Berlin."

"I'm a little down - 21.50m is not all that good," Cantwell said. "I wish I had a couple more throws. It was all in the timing. It hurts right now but maybe tomorrow silver will feel better. If I had gotten a better throw early, I think I could have put it away. And I felt like, 'God dang, I was so close.' I feel like I'm gut-shot right now. The kid from Poland, he found a way to get it done. He won it. I didn't do my job."

"I feel really glad," said Majewski, before dedicating his medal to "all Polish people." "I want to say I made it. I just beat everyone, and I made it."

1. Tomasz Majewski, POL, 21.51 (PB); 2. Christian Cantwell, USA, 21.09; 3. Andrei Miknevich, BLR, 21.05; 4. Dylan Armstrong, CAN, 21.04 (NR); 5. Pavel Lyzhyn, BLR, 20.98 (PB); 6. Yuriy Bilonog, UKR, 20.63 (SB); 7. Reese Hoffa, USA, 20.53; 8. Pavel Sofin, RUS, 20.42; 9. Rutger Smith, NED, 20.41; 10. Yuri Bialou, BLR, 20.06; 11. Ivan Yushkov, RUS, 19.67; . Adam Nelson, USA, NM;

MEN'S HAMMER THROW

QUALIFYING

With 13 men having surpassed 80 meters this season, only five contestants exceeded the 78m auto-qualifier, and only Hungary's Krisztian Pars exceeded 80m (80.07m). The other four automatic qualifiers did so on their openers.

Athens Olympic champion Koji Murofushi marked a 78.18m in Group A, behind Pars.

In Group B, Poland's 2000 Olympic champion Szymon Ziolkowski (79.55m), Slovenia's Primož Kozmus (79.44m), and three-time reigning World champion Ivan Tikhon (79.26m) qualified with ease.

The other qualifiers included European silver medalist Olli-Pekka Karjalainen of Finland (77.07m), Belarus' World silver medalist Vadim Devyatovskiy (76.95m) and Slovakia's World championship bronze medalist Libor Charfreitag (76.61m), Germany's Markus Esser (77.60m), Croatia's Andreas Haklits (77.12m), and Canada's James Steacey (76.32m) and Dilshod Nazarov.

Notable non-qualifiers were Athens 2004 bronze medalist Esref Apak of Turkey (74.45m) and Italy's 2000 Olympic silver medalist Nicola Vizzoni (75.01m).

FINAL

The small Baltic state of Slovenia, which became independent in 1992 and then had athletes competing in the Olympics for the first time in 1996, had never produced an Olympic track and field gold medalist.

Slovenian Primož Kozmus answered the call and upset the form charts to become his country's first Olympic champion.

Defending World champion Ivan Tikhon struck the first significant blow of the final, launching a 78.49m effort, and avoiding some of his early throw miseries from previous major championships. He was quickly eclipsed by the defending Olympic champion, Japan's Koji Murofushi, who posted a 79.47m opener. Tikhon countryman, Vadim Devyatovskiy, fell into place behind Murofushi with a 79.00m toss. The 28-year-old Kozmus followed next and posted the first 80m effort (80.75m) of the competition.

The second stanza saw significant movement. After an opening foul, Libor Charfreitag followed with a 77.62m toss to get ahead of the cut for finals. Fin Pekka Karjalainen briefly moved to second (79.59m) before being bettered by Tikhon (80.56m). Murofushi then improved to 80.71m. Devyatovskiy launched an 81.61m leader, only to be bypassed on the next throw by Kozmus (82.02m), who reacted angrily after his throw.

"I thought I would need 83 meters at least for gold. And I expected Ivan Tikhon to throw this at some stage during the competition," explained Kozmus.

"The hammer escaped out of my hands because I lifted my right leg," Kozmus commented on his reaction after the second throw.

Hungarian Krisztián Pars jumped to the bronze slot on the final throw of the round, nailing an 80.96m toss.

The third round saw only one improvement, Andras Haklits at 76.58m. Nazarov, Charfreitag and Steacy joined Haklits on the sidelines for the finals.

The fourth round was a repeat of the third, with no improvements once again.

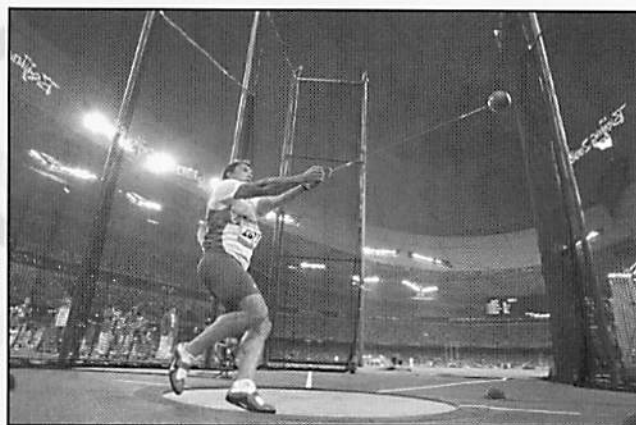
Tikhon produced a fifth round 81.51m laser to solidify the silver slot that he held throughout the competition. Pars (80.16m), Devyatovskiy (80.96m) and Kozmus (80.98m) also produced 80m throws.

After reordering before the final throw, Charfreitag, Ziolkowski, and Karjalainen all produced fouls. Murofushi's 77.26m effort left him in fifth place. Pars 79.83m left the medal hunt to the last three contestants.

Tikhon was unable to improve (80.87m). Devyatovskiy whirled furiously before cranking his hammer into the cage. The rage and frustration of the Belarussian was spontaneous white-hot. The gold was belonged to Kozmus, who crowned his achievement with his sixth throw over 80 meters (80.85m).

"That is true, but I was really not happy with my technique, although I still managed to put together a fine series. The problem is the final part of my throw when releasing the hammer. I had difficulties with this all season so far," said Kozmus.

Kozmus, who failed to qualify in Sydney eight years ago

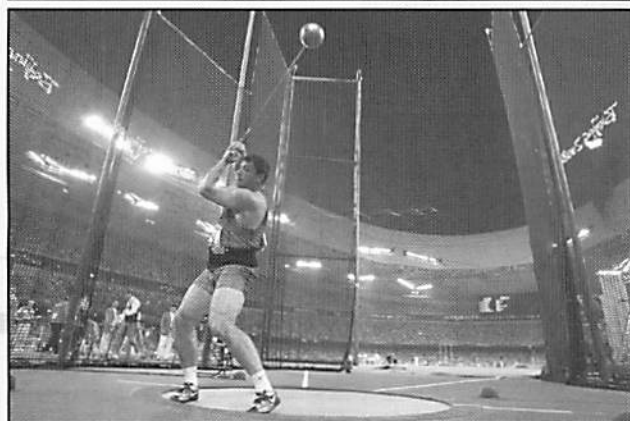
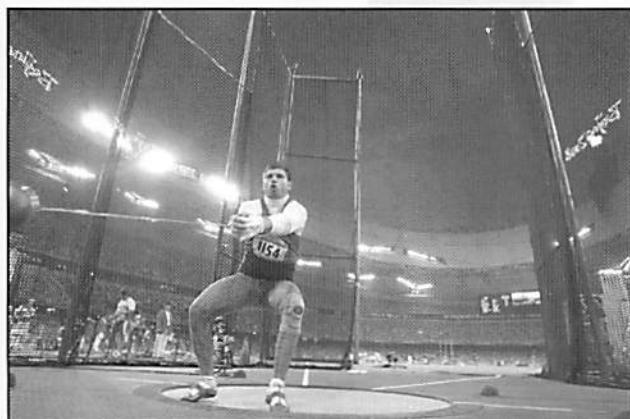


Kozmus

and finished sixth in Athens, did not expect that 82.02m would be enough for gold. That was the reason why he reacted so angrily about not throwing even better.

"This is a dream come true; of course I am very happy," said Kozmus. "I expected to win a medal when entering the competition but I couldn't expect gold since the other throwers are so strong as well – I could only hope to win."

The Slovenian had fallen from gold to silver in Osaka last year at the World Championships, when he led into the last



Belarus took silver and bronze behind Devyatovskiy and Tikhon.

round, only to be undone when Tikhon produced a last attempt winner.

"I did not want that to happen again, that was why I was very nervous," said Kozmus, who turned away when Devyatovskiy had his last throw, but glanced at the video screen. When Devyatovskiy's hammer hit against the cage, he started celebrating. "I said, 'Thank you, Vadim.'"

"Primož is a very strong thrower and he deserved to win the Olympic gold tonight. I had hoped for 83 meters, but it was not possible," said Devyatovskiy.

Tikhon has been the dominant force in hammer throwing since the Athens Games four years ago, where he took

silver behind Murofushi. He has reigned supreme at the world championships with three consecutive golds from Paris in 2003, Helsinki in 2005 and Osaka last year.

1. Primož Kozmus, SLO, 82.02 (SB); 2. Vadim Devyatovskiy, BLR, 81.61; 3. Ivan Tikhon, BLR, 81.51; 4. Krisztián Pars, HUN, 80.96; 5. Koji Murofushi, JPN, 80.71; 6. Olli-Pekka Karjalainen, FIN, 79.59. (SB); 7. Szymon Ziółkowski, POL, 79.22; 8. Libor Charfreitag, SVK, 78.65; 9. Markus Esser, GER, 77.10; 10. András Haklits, CRO, 76.58; 11. Dilshod Nazarov, TJK, 76.54; 12. James Steacy, CAN, 75.72;

MEN'S DISCUS THROW

QUALIFYING

Three men from each qualifying group met or exceeded the automatic qualifying standard of 64.50m. Pre-meet favorites Virgilius Alekna (65.84m) and Gerd Kanter (64.66) were among them.

Spain notched two qualifiers, national record-holder Mario Pestano (64.42m) and Frank Casanas (former Cuban), who salvaged his Olympics after two fouls, with a clutch 64.99m.

Germany's Robert Harting (64.19m) and the Netherlands' Rutger Smith (65.65m) were silver and bronze medalists behind Kanter. Disgraced Hungarian Robert Fazekas, who for doping control infringements was stripped of his Olympic title in 2004, made the final in the penultimate qualifying position (62.64m).

Not so Zoltan Kovago of Hungary, the 2004 Olympic silver medalist, who only managed a best of 60.79m. His Estonia's Aleksander Tammert who rose to the bronze medal in 2004 with the Hungarian's departure from the podium in Athens will join Kanter in the final after throwing 63.10.

Russia's Bogdan Pishchalnikov needed all three throws to progress, propelling the discus out to 64.60m in the third to automatically qualify. Piotr Malachowski, 25, led the qualifiers with a first round 65.94m. Malachowski set a national record of 68.65m at the end of July.

Rashid Shafi Al-Dosari of Qatar (63.83m) and Finland's Frantz Kruger (62.48m), the 2000 Olympic bronze medalist were the other qualifiers.

The U.S. contingent of Ian Waltz, Michael Robertson and Casey Malone were eliminated as well.

The big news was Iranian Ehsan Hadadi (61.34m), who had rewritten the Asian record all year, with a best of 69.32m, did not progress to the final. Hadadi, who trains in Minsk and is coached by a Russian, owns three victories over World champion Gerd Kanter, and two over defending double Olympic gold medalist Virgilius Alekna.

FINALS

Two-time Olympic champion Virgilijus Alekna met the wave of the future a year ago in Osaka. He was vanquished by Estonian stud Gerd Kanter, with German Robert Harting (bronze) right on his heels. This competition would be a chance for the Lithuanian to separate himself from Lars Reidel in Olympic lore, and take another step toward the immortal American, Al Oerter.

Bogdan Pishchalnikov, sporting long hair pulled up on top of his head, throwing second in the order, launched a 64.09m opener to prime the competition. Alekna badly fouled his first effort, falling to his left while the discus headed right into the netting.

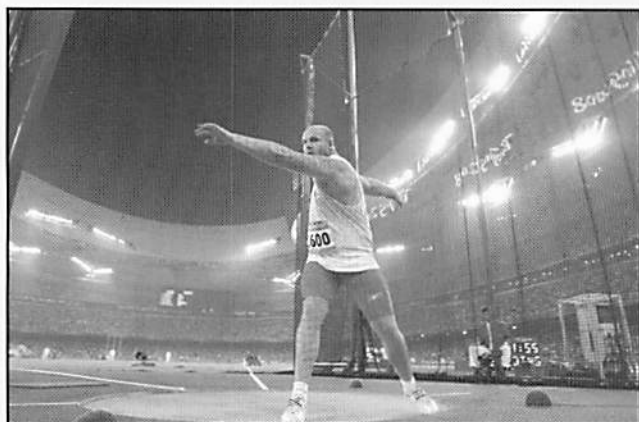
Three throwers later, Poland's little-known Piotr Małachowski jumped into the lead with a 66.45m throw. The throw was all the more impressive as he had aborted his first spin prior to release, and had to quickly regroup. 2007 World Championships bronze medalist Robert Harting moved into the second position, launching a 65.58m toss. Estonian Gerd Kanter, the pre-meet favorite, opened slowly at 63.44m, and was passed by Rutger Smith.

In the second round, Pishchalnikov improved slightly to 64.25m. Alekna got on the board in grand fashion, moving to second place at 65.77m. Małachowski served notice that he was in the competition to stay, improving to 67.82m and stretching his lead. Kanter appeared to find his rhythm with a 66.38m toss. Rutger Smith joined the medal chase with a long pull on a 65.31m throw.

Alekna was unable to improve in the third round, as was Malachowski, who added a 66.98m toss to his already impressive series. If he had gotten the front edge of the discus relatively flat, Malachowski might have landed a 70m throw.

Harting made a serious move, non-reversing a 67.09m to grab the silver position. Kanter and Smith recorded 62.75m and 64.36m throws, respectively.

Heading into the final three throws, the scoreboard read,



Małachowski

Machowski, Harting and Kanter, with Alekna close behind. Mario Pestano, Rasheed Al-Dosari, Frantz Kruger and Aleksander Tammert were eliminated.

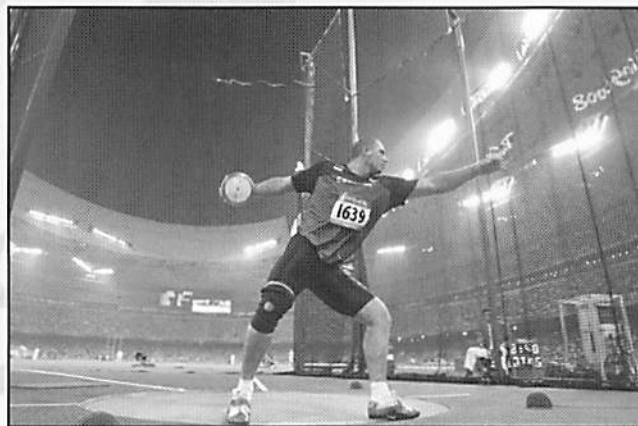
In the fourth round, Pishchalnikov slung a 65.88m down the right sector line to move into sixth place. Alekna, having looked relatively pedestrian in his preliminary efforts, barely missed the lead at 67.79m.

He was followed by Kanter, who seized control of the meet by utilizing his unique combination of form, temp and athleticism to land a 68.82m bomb that he knew was good probably before he released it.

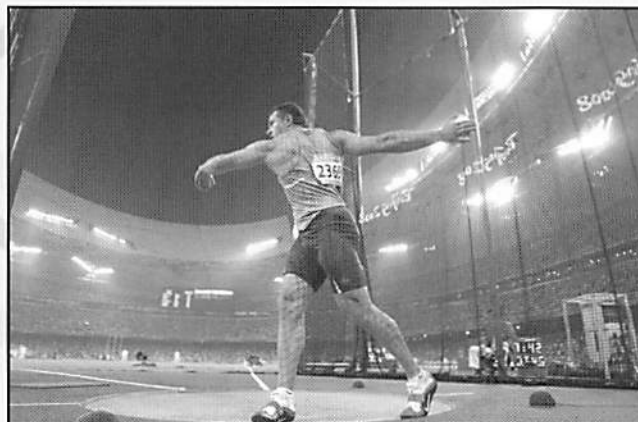
The fifth round saw seven fouls and no improvements. If Kanter was to be overtaken, it would have to be in dramatic fashion.

Spaniard Frank Casañas began celebrating a well-timed effort while completing his reverse. The result: 66.49m to jump to fifth. Smith, now sitting sixth, improved slightly to 65.39m, but it was not enough to move up in the order.

Pishchalnikov fouled, and Harting (66.51m) did not improve. Alekna, with one last shot, spun his way to 67.18m, another solid effort, but certainly not of the quality he had demonstrated on this stage before.



Kanter



Alekna

Ma'achowski, who had been brilliant in the preliminaries, fouled an effort that would have been sort, then raised his hands in celebration and ran to the stands to embrace the Polish delegation, ecstatic with his silver medal.

And the gold belonged to the Estonian who concluded his day with a 65.98m effort.

Prior to Kanter's win, Estonia had won just one men's Discus Throw medal at Olympic level, the bronze of Aleksander Tammert in Athens.

The Osaka world gold last summer allowed Kanter for the first time to step out of the shadow of Alekna's brilliance, and helped to raise his championship stature closer to the level of his personal best. Kanter's 73.38m from 2006 stands him as number three on the world all-time list.

"The Olympic title is the top of my career but it's not such a good result," said Kanter, "...I've been training pretty hard and this result doesn't really show my potential."

"My best chance (for a big throw) was in the fifth round, but that was during the women's 400m final so I had to take a break. I lost concentration."

The 29-year-old business management graduate was thanked by the Estonian President shortly after his victory and will be rewarded with a tidy \$100,000 Euros from the Estonian government for his accomplishment. "The next step is to break the World record. Now I've got this, I can concentrate on getting better."

American hospitality helped Kanter climb to the top of the podium. For the past four years, he has gone to the United States Olympic Committee's Training Center in Chula Vista, Calif., for his spring training work. And no American qualified for the 12-man discus final.

Alekna, thought to be invincible as late as 2006, is no longer the standard bearer in this event. Kanter's 2007 win in Osaka could have been asterisked due to a calf-injury sustained by Alekna. There was no doubt this evening. As the torch was passed from Jurgen Schult to Lars Reidel and then to Alekna, Kanter has stepped to the fore.

"I am thinking about finishing my career after 2008," said the 36 year-old Alekna after the competition. "I haven't decided yet but I may not go to the next Olympics."

"I knew the pressure was on me not to break down," said Kanter. "But it was Alekna who broke down. That was only right. It was time for a younger man to take over."

1. Gerd Kanter, EST, 68.82; 2. Piotr Malachowski, POL, 67.82; 3. Virgilijus Alekna, LTU, 67.79; 4. Robert Harting, GER, 67.09; 5. Yennifer Frank Casañas, ESP, 66.49; 6. Bogdan Pishchalnikov,

RUS, 65.88 (PB); 7. Rutger Smith, NED, 65.39; 8. Róbert Fazekas, HUN, 63.43; 9. Mario Pestano, ESP, 63.42; 10. Rashid Shafi Al-Dosari, QAT, 62.55; 11. Frantz Kruger, FIN, 61.98; 12. Aleksander Tammert, EST, 61.38;

WOMEN'S SHOT PUT

QUALIFYING

With 15 women qualifying automatically for the final (18.45m or better), it is easier to say who didn't progress to the contest for medals than who did!

Essentially the two notable names to miss out were defending champion Yumileidi Cumba of Cuba, and Belarus' Sydney 2000 champion Yanina Pravalinskaya-Karolchyk, with 17.15m and 17.7m. They were lost in a deep field.

World outdoor and indoor champion Valerie Vili of New Zealand and Belarus' Nadzeya Ostapchuk, who was the global gold medalist in Helsinki two years before and heads this year's lists with 20.98m, progressed with ease into the final, thanks to first round puts of 19.73m and 19.08m. Vili's mark was the best of the qualification round overall, topping out Group A, while Ostapchuk's heave was the second furthest release of the second pool of competitors.

There will be a complete squad of Chinese to keep the crowd pumped up. 19-year-old Gong Lijiao's 19.46m PB, which headed Group 'B,' was the best Junior result in the shot since 1994 (Cheng Xiaoyan's Asian junior record, 20.02m). She will be joined by 2008 World Indoors bronze medalist Li Meiju whose 19.18m was a PB and Li Ling (18.60m). All three were finalists in last summer's World championships in Osaka.

While the host will have the only full complement in the final, Belarus, Cuba, Germany, Russia and the USA will each have pairs of putters.

Backing up Ostapchuk for Belarus will be Natallia Mikhnevich who is second in the world's standings for 2008, and qualified with a first round 19.11.

Cuba might have lost their Olympic champion – she hasn't been in form so it is of no real surprise – but will still be well represented by Misleydis Gonzalez (18.91) and Mailan Vargas (18.47).

Nadine Kleinert of Germany, the Olympic silver medalist in Olympia in 2004, and Christina Schwanitz who finished second to her in the national champs both went through via 18.52 and 19.09 bests respectively.

Anna Omarova, 8th at the 2007 World champs and at this winter's World Indoors, was the best of the Russians (18.74) but it took her three attempts to achieve. Olga Ivanova made it with her final round fling of 18.46.

National champion Michelle Carter (18.49), and compatriot Jillian Camarena whose 18.51m was a season's best, make up the US pairing in the final.

Chiara Rosa progresses (18.74m) but her fellow Italian European Indoor champion Legnante Assunta does not.

FINAL

The women's shot was once the domain of the former Soviet Bloc nations. If you weren't Eastern European, or perhaps Cuban, you stood no realistic chance of ascending the awards podium.

Valerie Vili has changed all that. Now the Russians, Belarussians and Cubans are battling for silver on an annual basis, while the Kiwi continues to chart new territory in an era where drug testing is more stringent.

Throwing third, Cuba's Mailin Vargas was the first to exceed 18 meters (18.28m). She was followed by Vili.

Vili's strategy was to launch a big throw early to put pressure on her opponents, and she did so in a big way. Throwing fourth in the order, she opened with 20.56m, breaking her own Oceania record and leaving the two Belarussians, Natalya Mikhnevich and Nadzeya Ostapchuk, to play a high-stakes game of catch-up. Vili left the circle with her forefingers raised high into the night sky and a look of resolve that any professional wrestler would love to duplicate.

"I wanted to put pressure on the others from the world 'Go,'" Vili said after the competition. "That's why I was so happy to come away with a personal best. It's just what I wanted to do."

China's Lijiao Gong followed Vili with an 18.45m effort to temporarily grab second place, then was trumped by teammate Meiju Li (18.68m).

Ostapchuk, the 2005 World champion and this season's world leader thanks to a 20.97m in Minsk at the end of July, languished in seventh place and way out of medal conten-

tion before her penultimate attempt.

Natalya Mikhnevich, the wife of men's shot bronze medalist Andrei Miknevich, opened at 19.16m to move behind Vili. Russian Anna Omarova launched a 19.08m, only to be bested by Cuba's Misleidis González on the final throw of the round.



Mikhnevich

In the second round Gong improved to 18.75m and Meiju Li stretched out to 18.99m. Miknevich made it clear to all the gold was not a foregone conclusion, using a lightning-strike right arm to post a 20.24m toss. The world-leader, Nadzeya Ostapchuk, got on the board with an 18.69m put after a first round foot-foul.

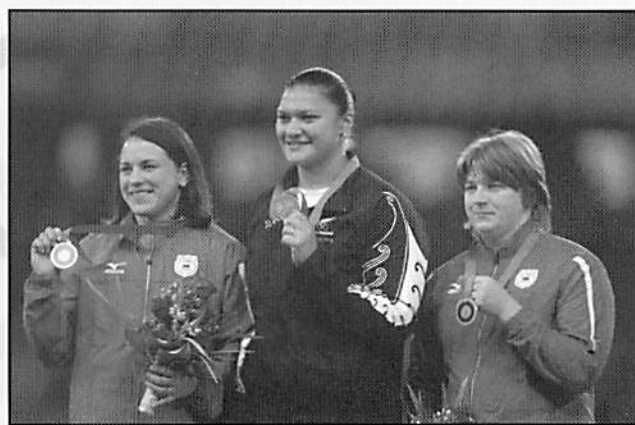
In the third round, Vili posted her third consecutive 20m throw (20.26m), but could not stretch her lead any further. Miknevich added a 19.87m to her series and German veteran Nadine Kleinert ensured her place in the finals with a 19.01m put.

As the final three throws commenced, Vili, Miknevich and Gonzalez were one-two-three, and Opstachuk was a distant eighth, and the last qualifier for finals. Dispatched were Americans Michelle Carter and Jill Camarena, along with Olga Ivanova (Rus), Mailin Vargas (Cub), Christina Schwanitz (Ger), Chiara Rosa (ITA) and Ling Li (Chn). Camarena and Rosa were the lone rotational throwers, ensuring an all-glide final eight.

Despite not making the final three throws, Carter and Camarena were the first U.S. duo to make the Olympic finals since the Eastern Bloc boycotted 1984 Olympics in Los Angeles.



Vili



Mikhnevich, Vili and Opstapchuk

In the fourth round Gong improved slightly (18.92m), and Kleinert (18.99m) nearly matched her prior effort. Vili posted yet another 20-meter (20.01m) throw.

Ostapchuk made her move at the top of the fifth round with a 19.86m toss that put her in the bronze position. Gong improved to 19.04m and Gonzalez launched a 19.50m to move into fourth.

Meiju Li stretched out to 19.00m on her last throw, with Gong also improving (19.20m).

With a podium date on the line, Gonzalez fouled. Neither Ostapchuk nor Miknevich showed another gear, and Vili passed her last throw, and the celebration was on.

"To come out on top feels amazing, so freaking amazing. I can't explain what's going on through my head right now. I couldn't have asked for a better day or moment," said Vili. "I wanted to make an impression on the other throwers and it worked."

Vili's resume this decade includes World Youth champion in 2001; World Junior gold in 2002; fifth in her first senior World Championships in 2003; third in 2005; Commonwealth champion in 2006; World Champion in 2007; World Indoor champion in 2008.

Vili came to the Games as the third best in the world this year. But she'd thrown little throughout the season as she nursed a shoulder injury, and tried to relieve the pressure from New Zealand's hopeful media.

"You never put your guard down with the Belarussians. Coming into this competition, I was ranked number 3. I had to give my all," concluded Vili.

There will be some celebrating to do for silver medalist Miknevich too, as her husband Andrei took bronze in the men's shot the night prior.

"We could see she was in good shape," said Miknevich, of Vili.

Ostapchuk, whom many in the international media had picked to win the gold because of her form this year, struggled all night and looked distracted. Afterwards, Ostapchuk said she had failed to adjust to Beijing's heat and had problems with cramps in her right leg. "In such difficult conditions, I'm happy with my bronze medal," Ostapchuk said.

1. Valerie Vili, NZL, 20.56 (AR); 2. Natallia Miknevich, BLR, 20.28; 3. Nadzeya Ostapchuk, BLR, 19.86; 4. Misleydis González, CUB, 19.50 (PB); 5. Lijiao Gong, CHN, 19.20; 6. Anna Omarova, RUS, 19.08; 7. Nadine Kleinert, GER, 19.01; 8. Meiju Li, CHN, 19.00; 9. Olga Ivanova, RUS, 18.44; 10. Mailín Vargas, CUB,

18.28; 11. Christina Schwanitz, GER, 18.27; 12. Jillian Camarena, USA, 18.24; 13. Chiara Rosa, ITA, 18.22; 14. Ling Li, CHN, 17.94; 15. Michelle Carter, USA, 17.74;

WOMEN'S DISCUS THROW

QUALIFYING

Nine contestants surpassed the automatic qualifying distance of 61.50m. Stephanie Brown-Trafton (USA) topped Group A (as well as Group B) at 62.77m on her third throw. Belarus' 2003 World champion Irina Yatchenko, hit 62.26m, followed very closely by Cuba's Osaka World championship bronze medalist, Yarelis Barrios (62.23m). Australian Dani Samuels (60.15m) and France's Melina Robert Michon (62.21m), also progressed to the final from the first pool, along with Ukraine's Olena Antonova (61.25m) and Belarussian Ellina Zvereva (60.28m) were also to make it through from Group A.

Romania's Nicoleta Grasu, headed Group B with a 62.51m throw on her second attempt. American Aretha Thurmond was the second-best qualifier of the group's four automatics (61.90m), coming on her second attempt.

Representing the host country, Aimin Song registered a 61.67m effort and advanced, along with countrywoman Li Yanfeng (61.29m). Czech Vera Cechlova hit a 61.61m opener.

Notable non-qualifiers included Russia's defending Olympic champion Natalia Sadova (58.11m), 1997 World champion Beatrice Faumunina (57.15m), and American Record holder Suzy Powell-Roos (58.02m).

FINAL

Unlike the finals of some other events, the women's discus podium placings were established in the first round, but not finalized until the penultimate throw had been taken. The final began with a slow rain falling.

Ellina Zvereva opened the competition with a 60.43m effort. Four subsequent throwers failed to reach 60 meters.

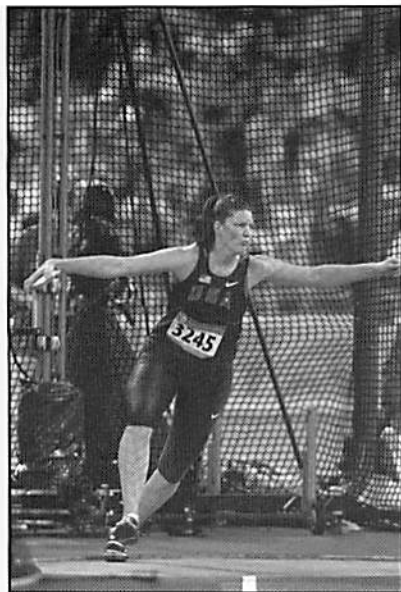
Then in stepped American Stephanie Brown-Trafton. The lightly-regarded Californian promptly launched a beautiful arcing throw that landed 64.74m away. She had made the first significant claim to a spot on the podium.

She was followed by Cuban Yarelis Barrios, who moved into the second slot at 63.17m and Ukrainian Olena Antonova finished out the round at 60.79m and moved into third.

Throwing third in the second round, Vera Cechlová (CZR) non-reversed a 61.08m toss to move into third. Brown-Tafton fouled, and Barrios closed the gap a bit, extending

to 63.64m. Meanwhile Antanov stretched out to 62.16m to regain third place.

The third round saw a second foul from Brown-Trafton, and an improvement by China's Aimin Song (62.22m) to snatch third from Antanov by six centimeters. Antanov followed with a foul.



Brown-Trafton

At the conclusion of the preliminaries, Brown-Trafton, Barrios and Song were in the hardware slots with Antanov in hot pursuit. Eliminated were Dani Samuels, Aretha Thurmond, Iryna Yatchenko (fifth OG, fifth straight final) and Nicoleta Grasu.

An uneventful fourth round produced three fouls and no improvements.

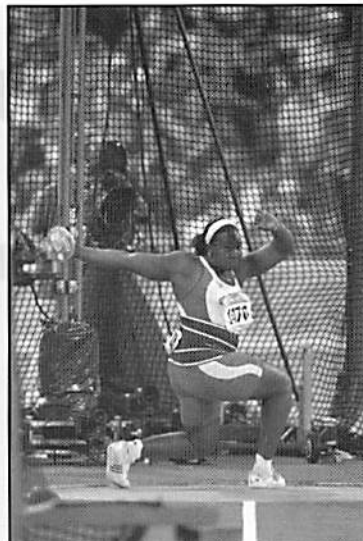
In the fifth round Cecholva improved her distance (61.75), but not her position. She was followed by Antanov who regained the bronze position with a 62.59 effort. Song was unable to respond to Antanov's charge, improving slightly to 62.20m. Brown was again unable to improve on her initial effort and sat precariously in first as the final stanza loomed.

Zvereva hit a 60.82m throw in the final round to move to sixth to make the only successful push in the final round. There would be no other drama.

Brown-Trafton had taken the pre-meet form charts and shredded them, giving the slow-starting U.S. track and field team its first gold of the Games. Although it was her second Olympics, Brown-Trafton had never qualified for the World Championships. At the 2004 Athens Olympics, she didn't make the final, finishing 11th in her group. At the US Olympic Trials in June, she finished third.

"I think I was the tallest person out there and that helps a lot because I've got long arms, long legs, and I know that the physique necessary to be a good discus thrower includes long arms and long legs," said Brown-Trafton. "I'm working on my strength and speed. Those things are going to come in time, and it can only get better from here."

Brown-Trafton's gold was the first Olympic victory for the U.S. in the women's discus since Lillian Copeland in 1932.



Barrios

"I am still going to be around for 2012 so, hopefully over the next four years, I can keep getting better."

Brown-Trafton's 212'5" winner was the shortest winning distance in 40 years.

When Brown Trafton left the track for the bowels of the National Stadium where the media had gathered to learn more about her, she was quick with her request. "I want to

meet Mary Lou Retton," Brown-Trafton pleaded. "Please, somebody hook me up. I have to meet Mary Lou."

Maybe Mary Lou ought to request an audience with Stephanie.

1. Stephanie Brown-Trafton, USA, 64.74;
2. Yarelis Barrios, CUB, 63.64;
3. Olena Antonova, UKR, 62.59, (SB);
4. Aimin Song, CHN, 62.20;
5. Vera Pospíšilová-Cechlová, CZE, 61.75;
6. Ellina Zvereva, BLR, 60.82;
7. Yanfeng Li, CHN, 60.68;
8. Mélina Robert-Michon, FRA, 60.66;
9. Dani Samuels, AUS, 60.15;
10. Aretha Thurmond, USA, 59.80;
11. Iryna Yatchenko, BLR, 59.27;
12. Nicoleta Grasu, ROU, 58.63;

WOMEN'S HAMMER THROW

QUALIFYING

The automatic qualifying mark was 71.50m, which was met or exceeded by seven women.

The leading qualifier was two-time World champion (2001, 2003) Yipsi Moreno of Cuba, the Olympic bronze medalist of 2004, at 73.92m, coming in the third round. Germany's reigning World champion Betty Heidler launched a second round 71.51m, and was joined by Martina Hrasnova (72.87m) of Slovakia and Anita Włodarczyk (71.76m) of Poland.

Osaka World bronze medalist Zhang Wenxiu (CHI) qualified easily, posting a 73.36m first throw, which led Group B with 73.36m. France's Manuela Montebrun (72.81m), was the next best thrower in Group B. Italy's Clarissa Claretta (71.82m) was also an automatic qualifier from Group A on her second attempt. Claretta and Montebrun finished in seventh and eighth in the Osaka final.

Athens medalist Yunaika Crawford of Cuba failed to qualify. However, 2000 Olympic winner Kamila Skolimowska

of Poland with 69.79m, Belarussians Aksana Miankova (69.77m), and Darya Pchelnik (71.30m) and Greece's Stiliani Papadopoulou (69.36m) also qualified.

Notable non-qualifiers included Russian Yelena Konevtsova, Ireland's Eileen O'Keeffe, Arasay Thondike of Cuba and Croatian Ivana Brkljacic, all of whom were finalists at the Osaka World Champs last summer.

FINAL

The women's hammer form chart offered numerous possible outcomes, as several strong candidates were in the hunt, but none of them so dominant as to exclude their competition.

Cuba's Yipsi Moreno was the Athens 2004 Olympic Games silver medalist with a personal best of 76.36m, and multiple World Championship medals. She won gold medals in the 2001 and 2003 World Championships and silver in 2005 and 2007.

Wenxiu Zhang was the 2007 World Championships bronze medalist. Darya Pchelnik of Belarus was third on the world list with a personal best throw of 76.33m. Germany's Betty Heidler won the 2007 World Championships. Martina Hrasnova of Slovakia owned the second best throw of 2008 with a personal best of 76.82m, and Oksana Miankova had a personal best of 77.32m, established earlier this season, the third longest of all-time.

Throwing second in the order, Darya Pchelnik (BLR) opened at 69.10m, followed by Martina Hrasnová (SVK) who launched a 68.28m throw.

Belarussian world-leader Aksana Miankova wasted no time serving notice to her competition, tucking a 74.40m throw just inside the left sector line. Osaka silver medalist Yipsi Moreno sent her hammer into the cage, but China's Wenxiu Zhang drew the home crowd's approval as she moved into second place at 74.00m.

Poland's Anita Włodarczyk threw 69.39m to slide into third place, while Heidler sent her initial offering into the cage.

There were multiple improvements in the second round. Pchelnik whirled out to 72.46m, having to brace her hands

on the surface to avoid a foul. Moreno got on the board at 73.95m to slide into third, and Zhang extended to 74.32m. Miankova, after a stopping herself after three turns, threw into the cage. As with her opener, Heidler again deposited her implement into the netting.

Pchelnik improved again in the third round (72.82m) and Włodarczyk produced a 71.56m. Heidler also got out of the cage for the first time, landing a 70.06m toss.

Heading into the final three throws, Miankova, Zhang and Moreno lead the way. Yelena Priyma (Rus), Stiliani Papadopoulou (Gre), Kamila Skolimowska (POL), and most surprisingly, Heidler, were eliminated.

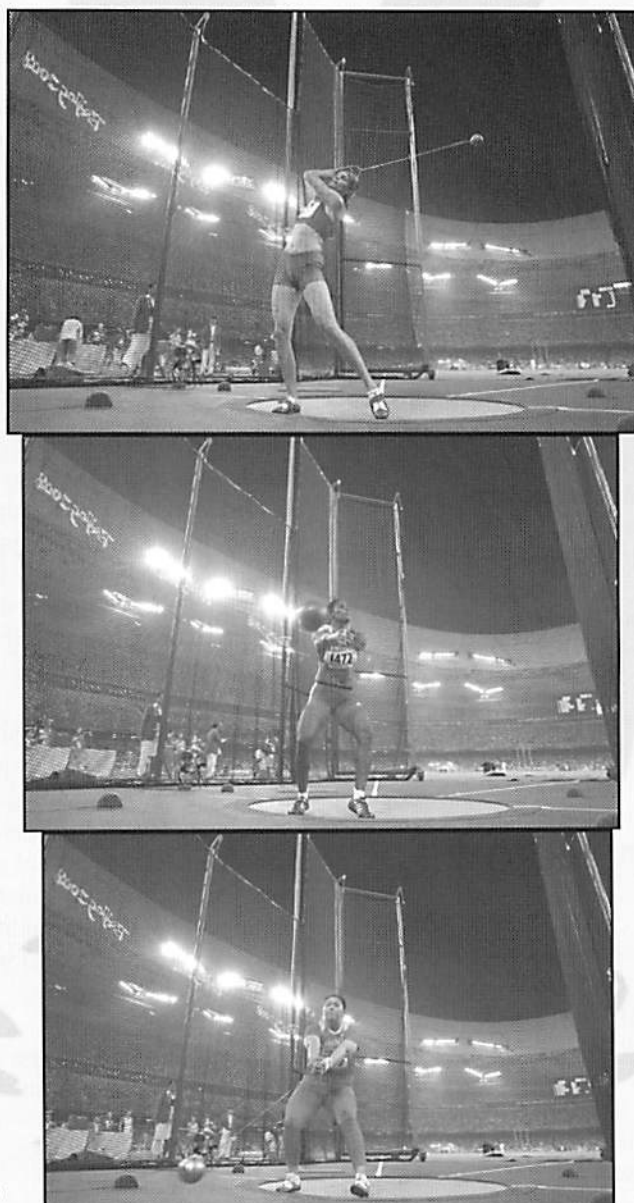
Manuela Montebrun opened the fourth stanza by launching a 72.54m throw to move up to fifth place. There were no other improvements on the round.

Pchelnik improved by a single centimeter (72.83m) on her fifth throw. Moreno extended to 74.40m to tie Miankova, discounting Moreno's own inferior supporting marks. It

wouldn't last long.

The 26-year-old Miankova, whose long limbs and lean frame give her the look of a high jumper, stepped into the ring to conclude the fifth round, and re-established her tenuous control of the competition, whirling to an Olympic record 76.34m.

In the last round, Pchelnik improved to 73.65m, but was still short of Zhang's 74.32m opener. Zhang (73.53m) failed to improve and was relegated to bronze.



Miankova, Moreno and Zhang.

In stepped Moreno in a familiar role. In Osaka she trailed Germany's Betty Heidler and narrowly missed surpassing her in the final round. Before grasping the hammer with her right hand, Moreno performed her pre-throw ritual twirling the hand four times and lifting it, which upon first sight appeared like she was blessing herself. Unfortunately for the Cuban, the Beijing result was much the same; a tremendous effort, but just short (75.20m) and stuck with silver. A disappointed Moreno summoned a smile, perhaps knowing that she had given a great effort.

Miankova released a half-hearted 51.72m to conclude the competition.

A year ago, Miankova competed at the 2007 World Championships in Osaka, failing to record a mark. Now she was an Olympic champion.

"It was a good first attempt but I didn't feel I was sure of a medal," Miankova said. "I knew that my opponents were very strong and I expected a higher result from Moreno. There was also a strong girl from Slovakia who was very well prepared (Martina Hrasnova finished eighth) and I thought we would have a tough fight."

1. Aksana Miankova, BLR 76.34, (OR); 2. Yipsi Moreno, CUB 75.20; 3. Wenxiu Zhang, CHN 74.32, (SB); 4. Darya Pchelnik, BLR 73.65; 5. Manuela Montebrun, FRA 72.54; 6. Anita Włodarczyk, POL 71.56; 7. Clarissa Claretti, ITA 71.33; 8. Martina Danišová-Hrasnová, SVK 71.00; 9. Betty Heidler, GER 70.06; 10. Yelena Priyma, RUS 69.72; 11. Stilianí Papadopoulou, GRE 64.97; . Kamila Skolimowska, POL NM;

WOMEN'S JAVELIN THROW

QUALIFYING

The women's javelin qualification was without a doubt the most congested of the throwing events. Having some 54 (!) participants (two flights of 27), there was some significant thinning of the herd to be done.

Czech World champion Barbora Spotakova and Germany's European record holder Christina Obergföll led the way, heading their qualifying groups with 67.69m and 67.52 opening throw automatic qualifiers, respectively.

Six other women topped the 61.50m, the automatic qualification mark.

Russia's 2005 European Junior champion, Mariya Abakumova, was the fourth best qualifier at 63.48m. Germany's Steffi Nerijs threw 63.94m. Also coming from Group A were automatic qualifiers Mercedes Chilla of Spain (61.81m) and China's Li Zhang (61.77m). Other Group B automatics were Great Britain's Goldie Sayers (62.99m) and Pole Barbara Madejczyk (62.81m).

Persistently injured defending Olympic champion Osleidys Menendez (CUB) qualified at 60.51m, and was joined by Sinta Ozolina (60.13m, Latvian record), Germany's Katherina Molitor (60.92m) and Romania's Felicea Moldovan-Tilea (60.81m).

Notable non-qualifiers included 43 year-old, five-time Olympian Lavern Eve (BAH), African Record-holder Justine Robbeson, American Record-holder Kim Kreiner, Greek Sávva Lika (fifth in Osaka), and many time championship medalist Mikaela Ingberg (FIN).

FINAL

The women's javelin boasted a deep and talented field, with any of six women being serious medal contenders. Rainy conditions in the middle rounds contributed to a lull in the competition distances, but could not stop records from falling in the first and final rounds.

Throwing fourth in the order, Christina Obergföll was the first thrower over 60 meters, well exceeding the barrier at 66.13m. Her lead lasted only as long as it took the next thrower, Russia's 2005 European Junior champion Mariya Abakumova, to hurdle down the runway and hurl a 69.32m statement to her competition. Wearing warm-up pants, with an exposed, trim midriff, Abakumova cut a sculpted, athletic figure.

Three throwers later, German Steffi Nerijs launched a 64.05m effort to slide into third. Great Britain's Goldie Sayers whipped a 65.75m National Record opener, followed by pre-meet favorite and defending World champion Barbora Špotáková. Špotáková threw a 69.22m laser to move just 10cm of the leader, confidently thrusting her forefinger high into the night sky after release. Osleidis Menéndez produced a 63.35m that would most likely get her another three throws.

The rains came early in the second round, perhaps dampening the competition as well as the runway. The competitors pulled up their hoods, threw on their caps, and huddled under two shelters.

Abakumova supported her opener with another fine effort (69.08m). None of the leaders improved in the second or third rounds.

Entering the finals, the 22-year-old Abakumova, Špotáková and Obergföll were in the medal positions, with serious threats looming from Sayers, Nerijs and Menéndez. Mercedes Chilla (Spa), Li Zhang (Chn), Sinta Ozolina (Lat) and Felicia Moldovan were eliminated.

As the finals started, the rain intensified, with officials doing their best to remove standing water from the runway by dragging towels in between throws. Under these conditions, there was no positional movement in the fourth and fifth rounds. However, Abakumova breeched the 70m

mark (70.78) in the fourth round to give herself a little more cushion and a new European record.

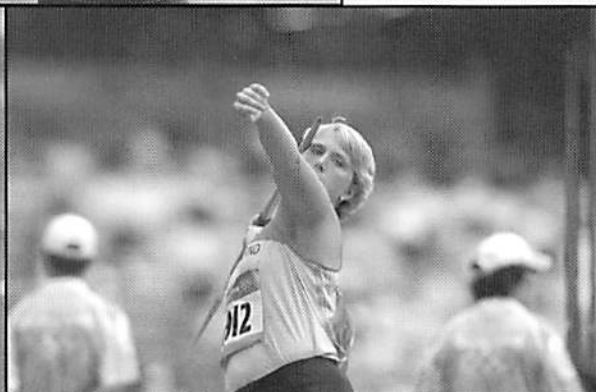
There was no need for reordering going into the last round. In fact, rounds three through five passed with no movement. That would change in a major way in the final stanza.

Barbara Madejczyk (Pol), throwing first, leapfrogged Katharina Molitor (Ger) with a 59.64m effort. Molitor was unable to respond, and Menéndez fouled. Nerius improved to 65.29m, but was still short of Sayers in fourth. Sayers finished her evening with a 56.83m to stay in fourth. Obergföll

"I don't know how I did it," said Špotáková. "I can tell you honestly. I don't know how I did it."

"It was very hard and I had many doubts since I didn't throw so well in the beginning. I usually win with my first throw. I've never won with my last attempt. This is the first time."

"I was like in a trance. I don't recall anything," she says. The javelin she threw flew almost to the line showing the world record. The stadium erupted. "That was a miracle, like if I didn't throw it at all" she said with tears in her eyes.



Špotáková (top), Abakumova (left) and Obergföll.

produced a last effort foul, and onto the runway stepped the 27-year-old Špotáková.

The long-striding Czech floated down the runway and unleashed a throw she immediately knew had a chance, and anxiously watched its flight, before dropping to her knees, a la a Wimbledon champion, awaiting the distance. The mark was displayed: 71.42m (fourth longest throw in history). The new leader was showered with congratulatory hugs by her competitors, save one.

The explosive Abakumova, who had posted a fine series, had work to do. The last say would be hers to retake the gold she had clutched the entire competition.

The rhythmic clapping was thunderous. Abakumova huffed and puffed, then launched into her approach. She could not yell loud or far enough to chase the spear past Špotáková. She could *only* muster a 67.52m effort, the culmination of the best series of the evening, yet only a silver medal performance..

"Last year I won the world championships, but to be an Olympic gold medalist is something much bigger. This is the maximum I can gain in my career," said the 2007 World Championship gold medalist.

"After the fourth throw, I realized I could be the best," Abakumova, who had a personal best of 64.28m coming into the year said later. "Until then, there were only Špotáková and I competing against each other. I could only say she performed so well. I just gave it my all. I'm satisfied with my result."

The ever-dangerous Obergföll, herself a 70m thrower, suffered from stalled throws due to too high a trajectory.

The champion lent a historic perspective to her win over the Russian that went well beyond athletics.

"It's extra sweet, this win, because it is the 40th anniversary to the day of the Russian invasion in 1968."

1. Barbora Špotáková, CZE, 71.42 (AR); 2. Mariya Abakumova, RUS, 70.78 (NR); 3. Christina Obergföll, GER, 66.13; 4. Goldie Sayers, GBR, 65.75 (NR); 5. Steffi Nerius, GER, 65.29; 6. Osleidys Menéndez, CUB, 63.35; 7. Barbara Madejczyk, POL, 62.02; 8. Kathrina Molitor, GER, 59.64; 9. Mercedes Chilla, ESP, 58.13; 10. Li Zhang, CHN, 56.14; 11. Sinta Ozolina, LAT, 53.38; 12. Felicia Tilea-Moldovan, ROU, 53.04;

MEN'S JAVELIN THROW

QUALIFYING

The steady precipitation was as much a headliner as any of the contestants in the qualifying round. The rain pushed the start of Group A by one hour. And once the competition began, the rain persisted, with officials vainly trying to sponge the soaked runway with towels.

You had to look no further than the scoreboard to see the impacts. Group A did not produce a single automatic qualifier, despite having 12 men with lifetime bests beyond the 82.50m qualifying distance. The best offering was from Canada's Scott Russell's at 80.42m. Joining Russell from Group A were Latvia's Ainars Kovals (80.15m) and Uladzimir Kazlou of Belarus (80.06m), Finn Teemu Wirkkala (79.79m), Australia's Jarrod Bannister (79.79m), and Swede Magnus Arvidsson (79.70m).

The runway remained wet and slippery even for the second group, even as the rainfall dissipated to a mist, then ceased.

Group B saw the first automatic qualification of the day, as Olympic silver medalist Vadims Vasilevskis of Latvia throwing produced an 83.51m.

Tero Pitkämäki generated a second attempt automatic qualification of 82.61m, but left the field with an ice pack on his thigh after a slipping and landing awkwardly during his release on the initial attempt. Defending Olympic champion Andreas Thorkildsen (NOR) produced 79.85m with his first attempt, then intentionally fouled his second and passed his third, knowing he would advance. The third automatic qualifier came in round two when Russia's Ilya Korotkov released an 83.33m.

Also advancing from Group B were Finn Tero Järvenpää (82.34m), Czech Vitezslav Vesely with a personal best (81.20m) that was the final line-up completed.

Notable non-qualifiers included 2003 World champion and two-time Olympic bronze medalist Sergey Makarov (RUS), Robert Oosthuizen of South Africa, and Latvia's Erik Rags, Russia's Aleksandr Ivanov, and American Breaux Greer, who in addition to not being recovered from off-season shoulder surgery, had broken his pinky finger prior to the Games.

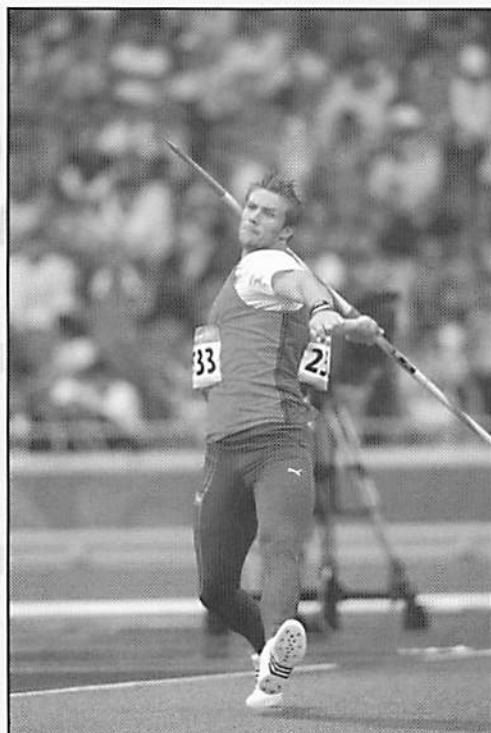
FINALS

Where many of the prior finals started slowly with tentative attempts by the contestants, the men's javelin contestants got down to business from the very start, then settled in for the interim rounds, before some final round drama.

Latvia's Ainars Kovals launched the first fair throw of the competition out to 79.45m. Two throwers later, Tero Pitkamaki employed his classic all-out head-first release to wing an 83.75m to raise the stakes. Russian Ilya Korotkov, who uses a very odd-looking pre-throw routine (think upper body – slasher movie, lower body – stomping a platoon of killer ants) followed that with an 82.54m, and Canadian Scott Russell opened at 80.90m.

Upstart Finn Tero Järvenpää, a major force in the 2008 campaign, stepped onto the runway next and took temporary control of the competition, screaming his spear out to 83.95m. He was followed by Vladimir Kozlov at 82.06m.

Defending Olympic champion Andreas Thorkildsen opened with an 84.72m strike to wrest the lead from Järvenpää. Thorkildsen's reaction to his effort was less than enthusiastic. Australian Jarrod Bannister wrapped up the first round with an 83.45m effort.



Thorkildsen

The second round produced five fouls and no movement in the standings. Thorkildsen, however, stretched his leading mark to 85.91m right down the center of the sector, and remained unenthused about his results.

Ditto the third round. No movement, and Thorkildsen once again improved to 87.93m, this raising both arms to acknowledge he was finding his groove.

Entering the final three throws, Thorkildsen, Järvenpää and Pitkämäki occupied the podium slots, with Wirkkala and Bannister in hot pursuit. Vadims Vasilevskis, Russell, Magnus Arvidsson, and Vitezslav Vesely were eliminated.

While the competition stalled again

in the fourth round, Pitkämäki plunged down the runway, veered to his left, and had his left plant foot slide, and his ankle roll awkwardly. The result something of a right shoulder roll, and amazingly, his best throw of the competition (85.83m) to leapfrog Järvenpää for the silver position. Järvenpää had no answer.

The fifth round was much like the second and third, with six fouls, no movement. Järvenpää blasted an 88 meter-plus rocket, but overstepped the foul line by wide margin in doing so. Thorkildsen stormed down the runway and blasted a 90.57m world-leading and Olympic record bomb. It would require a super-human effort to unseat him.

The sixth-round fireworks came from the arm of Kovals, who launched a personal best 86.64m rocket to vault past Pitkämäki for the silver medal. Järvenpää offered an 83.63m finale to finish off the podium. Pitkamaki, throwing second to last, was game with an 86.16m toss, came up just short and settled for bronze.

Thorkildsen finished with a meaningless foul and walked off the runaway as a two-time Olympic champion.

Thorkildsen had hinted that he was in very good condition just prior to these Olympics with his 87.36m win in Stockholm at the end of July.

Thorkildsen improved the Olympic record of 90.17m held by the Jan Zelezny, the three-time Olympic champion and reigning World Record holder, and helped to define the brilliance that was the Norwegian in Beijing.

"I set two goals for this year - one was to win a medal in Oslo, my hometown," said Thorkildsen. "The second was to win an Olympic gold medal. I've always said that as long as I can win in Oslo and at the Olympic Games, that's it for me. I knew I could reach it."

Thorkildsen, who now has five major championship medals, immediately set his sights on the record of 11 won by the great Janis Lusi. "I wanted to get the record, especially after such a strong start," he said. "I'm now on five so we'll see how we go. Tonight I just couldn't believe



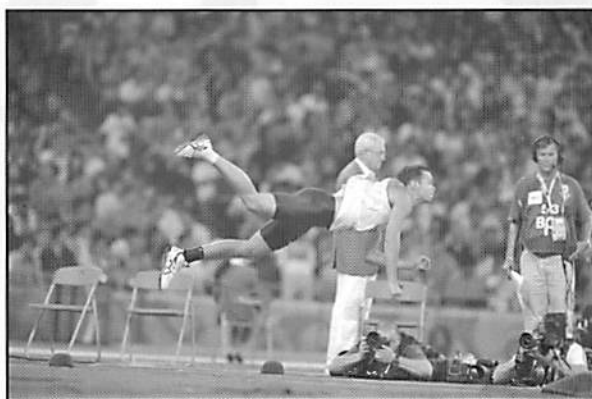
Kovals

I had beaten the pack."

"Before the final throw I knew I could throw better," said Kovals, who has struggled all year to find his form. "I suffered some psychological problems this year. But today I was pretty calm."

Pitkamaki was disappointed with his bronze. "I wanted the gold but I've had a lot of problems and injuries," he said.

1. Andreas Thorkildsen, NOR, 90.57 (OR);
2. Ainars Kovals, LAT, 86.64 (PB); 3. Tero Pitkämäki, FIN, 86.16; 4. Tero Järvenpää, FIN, 83.95; 5. Teemu Wirkkala, FIN, 83.46; 6. Jarrod Bannister, AUS, 83.45; 7. Ilya Korotkov, RUS, 83.15; 8. Uladzimir Kazlou, BLR, 82.06 (PB); 9. Vadims Vasilevskis, LAT, 81.32; 10. Scott Russell, CAN, 80.90; 11. Magnus Arvidsson, SWE, 80.16; 12. Vitezslav Vesely, CZE, 76.76;



Pitkämäki

BEIJING BY THE NUMBERS

BY GLENN THOMPSON

Belarus, an Eastern European nation slightly smaller geographically than Kansas, with an estimated population of 9.6 million, thoroughly dominated the throws competitions in Beijing. Using a 10-8-6-4-2-1 scoring system, the former Soviet Union Baltic state won only the women's hammer, but grabbed 2

silver and 3 bronze medals to accumulate a total of 51 points. The men were led by Andrei Miknevich (SP-bronze) and Vadim Devyatovskiy (HT-silver) and Ivan Tikhon (HT-bronze) for a total of 22 points to lead the men's scoring.

Similarly, the Belarussian hammer throwers were the big scorers (14 points), led by Aksana Miankova (gold) and Darya Pchelnik (fourth). Belarus also scored 14 in the shot behind Natallia Mikhnevich, (silver) and Nadzeya Ostapchuk (bronze).

Cuba scored 21 points, all by its women, to finish second overall and second amongst the women as well. China scored in three events to register 12 points and a third place finish for their women.

OVERALL SCORING

	MEN	WOMEN	TOTAL
BLR	22	29	51
CUB	0	21	21
POL	18	1	19
USA	8	10	18
FIN	13	0	13
GER	4	8	12
CHN	0	12	12
CZE	0	12	12
SLO	10	0	10
EST	10	0	10
NOR	10	0	10
RUS	1	9	10
NZL	0	10	10

Poland rode gold (SP - Tomas Majewski) and silver (DT - Piotr Malachowski) for second place among the men and third overall. Finland finished third among the men on the strength of their javelin contingent (Tero Pitkämäki - bronze, Tero Järvenpää - fourth, Teemu Wirkkala - fifth) that garnered 13 points.

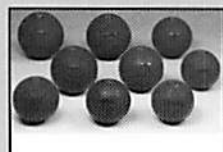
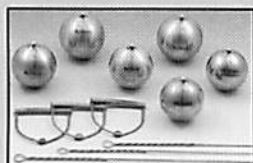
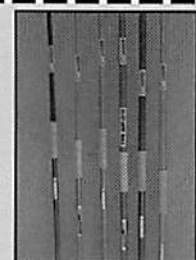
The U.S. had only two scorers, Christian Cantwell (shot - silver) and Stephanie Brown-Trafton discus - gold) to place fourth overall. *L&S*

MEN'S SCORING

	MSP	MHT	MDT	MJT	MEN
BLR	8	14			22
POL	10		8		18
FIN		1		12	13
SLO		10			10
NOR				10	10
EST			10		10
USA	8				8
LAT				8	8
LTU			6		6
HUN		4			4
GER			4		4

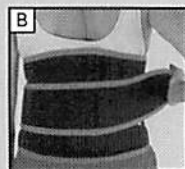
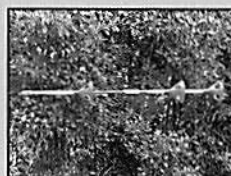
WOMEN'S SCORING

	WSP	WDT	WHT	WJT	WOMEN
BLR	14	1	14		29
CUB	4	8	8	1	21
CHN	2	4	6		12
CZE		2		10	12
USA		10			10
NZL	10				10
RUS	1			8	9
GER				8	8
UKR		6			6
GBR				4	4



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INSIDE PERSPECTIVES

By GLENN THOMPSON

There were not many English-speaking athletes who wanted to reflect on their Beijing experience. For most, it was something they weren't anxious to reprise. Nonetheless, two did come forward and share their thoughts about the 2008 Olympiad.

LIBOR CHARFREITAG (SLOVAKIA) - HAMMER (8th)

I'd say these Olympics were definitely the smoothest games ever. Contrary to the Athens Games, these were prepared well ahead of time. You could see this fact anywhere you went. The Chinese did a tremendous job and prepared things to the last detail. The Chinese people were extremely nice and sweet; they always wanted to help. The only [minor] problem was with communication.

I was not at the Opening Ceremony, nor the Closing Ceremony, but heard it was a memory for a lifetime. Even the weather was nice, just a few rainy days. But there was almost no smog, or at least I didn't feel there was so much.

The National Stadium, a.k.a. The Bird's Nest, was amazing. It's a huge structure for 91,000 spectators. I was really happy to see the stadium pretty much full at all times, whether you competed early morning or late night. Athletics (track and field) really is the number one sport when it comes to the Olympics. Too bad it isn't the same always.

I went to Kochi, Japan, for a training camp before the Games. I stayed for about 10 days there, mainly to get used to the time change, recover after the long trip, and fine tune for the Games. It was a great place and everything came together as planned. I got to Beijing about four days before the Qualifying round, and I felt better every day. I was in great shape and everything was there in place for me to compete well.

The competition was great. The men's hammer throw in the last three years is very competitive, as you have six or seven guys at the same level. Anyone from that group can win. I felt great being in the final, and wanted to try to win a medal. Even warm-ups in the stadium were looking very promising. But then the competition did not quite turn out the way I wanted. The official called a foul on my first throw, and I disagreed. I never touched the rim,

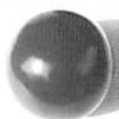
and saw it on replay on the big screen. I told them to measure it and that I was ready to protest after the final. I was the first thrower, and the first throw is very important to make it to top eight in that field of throwers. So I had to take a different approach to the second throw. I did qualify for the top eight anyway, but I could feel how my energy levels were going down. At that moment, I realized I didn't have it in me to fight for a medal. I could have improved a few feet to jump up 2-3 spots, but that was it. I guess we don't always get what we want. There will be more chances in the future. I am glad I was there, I gave it my best shot and finished 8th.

ADAM NELSON (USA) - SHOT (DNP)

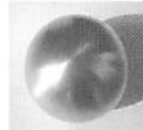
Third time's a charm, right? Just kidding. The 2008 Beijing Olympics were an amazing production. From the moment of arrival, you could sense the excitement, experience the production, and observe the great thought and planning that went into every detail. In my opinion, most of the magic of an Olympic Games doesn't happen inside the stadium. It's the show that surrounds the venue. This Games certainly wasn't a disappointment.

As for the competition, not a whole lot to say here. Morning qualifier, evening final. I felt fine and should have thrown a lot better. As I said after the 2004 Olympics, you can't foul multiple times and expect to win. To win a major championship, you have to improve throughout the competition. Unfortunately, I did not.

I plan to compete for at least another year. Will I go for four more? That's an excellent question. *L&S*



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SHOCK THE WORLD!

BY GLENN THOMPSON

Stephanie Brown-Trafton had to sweat out a third place finish in the discus in Eugene at the Olympic Trials just to secure a ticket to Beijing. Less than two months later, Brown was not only the top American at the Olympic Games, she was the top discus thrower. In the world. Period.

Brown-Trafton took some time out of her busy post-Olympic schedule to give Long & Strong some insight into the sweetest of athletic victories.

Long & Strong: What was your travel itinerary?

Stephanie Brown-Trafton: I arrived in Beijing on August 1, then went to the training camp in Dalian on August 2. I stayed in Dalian until August 12, then returned to Beijing to compete in the prelims Aug 15th. The finals were on the 18th. I was able to see some of the sights in Beijing on a city tour on Aug 23 with a family that I met at one of the charity lunches that I had been asked to attend. The Hanna family from Dallas became my family away from home, and they invited me to take a tour around Beijing with a tour company. On the 24th, same day as Closing Ceremonies, I got to go to the Great Wall. One of my friends from India (discus thrower Krishna Poonia) had extra tickets and called me. Before her call I thought I was going to miss out on seeing one of the seven wonders of the world and was a little sad. I went to the Wall and took a few pictures but did not climb any stairs....I know my limitations and did not **feel like getting worn out that day.**

L & S: Was there anything different about your mental approach coming into Beijing versus Athens four years ago?

SBT: Athens 2004 was a year to gain experience at the world-class level. I had no prior experience with international meets so I was able to get a first-hand glimpse of the energy, emotions and distraction that an Olympian must handle. In Beijing I was more focused on competing well in the qualification round and earning a spot in the finals. In

the finals, all it takes in one big throw. In all of my practices and meets this year, I was confident that I could put everything together for one throw. Next year I will be focusing on being more consistent in the 63-65 meter range, and a few meets I think I can get over 67.

L & S: What was your strategy as you entered the ring for your first throw? When it left your hand, did you know it was a good throw?

SBT: The strategy for the finals starts in the warm-up track. I have a pretty lengthy warm-up routine, and I am usually the first one to start throwing in the practice area. My goal is to increase the energy level at a constant pace, take 2-3 standings, a few half-throws, then start in on the fulls with a few dry runs in between. In Beijing I was

probably winning the comp at the warm-up track too, which can be a bad thing. You don't want to go all out in practice and leave nothing for the competition. I didn't want to waste too much energy so I shut it down at the warm-up track fairly early so I could change into the comp uniform and check in for the comp.

Before the first throw in the finals I was very relaxed and focused on

being patient, not forcing anything. The pictures and video tell the whole story. I was singing a song based on a favorite Bible verse, Joshua 1:9. One of the still pictures of the throw was taken from the top of the ring, straight down. It shows the point of release and my eyes are open and looking at the discus as it leaves my hand. I am going to frame that picture because I want to be able to do that every time I throw. I have been having trouble this year with yanking my head off at the finish, but that picture shows clearly that for just one throw I kept my eyes on it.

L & S: You talked about the warm-up track. What was the complete protocol routine?

SBT: The protocol for me at the Olympics is as follows: Leave housing for warm-up track about 2.5 hours before comp time. About 2 hours before I start to jog and stretch. Depending on the number of competitors I gauge the



amount of time needed to get a couple standing throws, half spins, and 4-6 fulls and start the warm-up accordingly. Athletes must arrive at the 1st call room about 1 hour prior to comp start time. 2nd call room is about 45 minutes before comp time. Arrival at the comp site is about 30 minutes prior. For the Olympics you are allowed 2 warm-up throws in the order of competition. There are a few girls who pretend not to understand the officials and get into the ring as soon as they throw their bags down at the comp site. Sometimes the officials allow it and sometimes they don't. After warm-ups are done, about 5 minutes before comp time, everyone lines up and the athletes are announced in order over the speakers and each waves to the crowd. The comp begins.

L & S: *Once the measurement was read, what was your reaction? Did you think, "Great, I'm going to make finals," or "That might get me a medal"?*

SBT: With that throw I knew I had a good chance at medaling. In those conditions a 64-meter throw is pretty good and would probably get me on the medal stand. I didn't watch the other marks for the rest of the competition. I didn't need to see the leader board to know how far the competitors threw. I could tell from the crowd noise. The crowd never had a strong reaction to the marks so I knew that the first throw was holding up.

L & S: *Tell us some more of the media obligations that ate up those five days after your medal.*

SBT: The U.S. has a program they call "Managing Victory" where special media coordinators set up interviews with TV, radio, newspaper, and in-person appearances. For 3 days I had a full schedule of interviews and a dozen or so emails from radio stations back home wanting to do live interviews for their weekday programs. Even a week later when I returned home, a news crew was waiting outside my house for an interview right after I got off the plane. My husband warned me so at least I had time to put on some makeup after my 11 hour plane ride. There were parades and parties and more TV, radio and newspaper interview requests after I returned. It was a little overwhelming but I know that the attention will only last a short while and it is welcome in this sport. Any media attention for a discus thrower is good.

L & S: *Do you think Europeans have any advantages at these competitions? It's certainly not always the case, but quite often they perform better (at or near their normal distances) in major championships than U.S. throwers.*

SBT: I'm not sure of the reason why American throwers have not performed up to their potential at large international competitions. I could reason that the Europeans spend a majority of their time in different countries adjusting to regional foods and customs and therefore have an advantage, but the Americans have been traveling overseas, too and have the same limitations. I think that this victory has opened the door for our throwers to gain confidence that it is possible to battle it out with the Eastern European countries at international meets. I know we have always had the ability but now we have the confidence to back it up.....I can't wait for more of our throwers to be in the finals at the major meets of the year. Making it to the finals is a major step, then taking care of business in the finals will get our people in a position for a medal.

L & S: *How much of China did you get to see? What impressed you most?*



SBT: I was worried that I wasn't going to get to see any of the places in China that most tourists see, like the Great Wall and the Forbidden Palace or Summer Palace. I was so busy doing media stuff that it was at least 5 days after my event before I could relax and get time to travel around. At one of the media engagements, a Make-A-Wish luncheon to meet

kids and families I met a great family from Texas. The daughter, Rachel, was battling leukemia (in remission) and came to Beijing to meet the softball team. They invited me to go sightseeing with them and I jumped at the chance. They ended up being my surrogate family in Beijing. After we went on a half-day trip around Beijing to all of the famous places, I took them to the Olympic Village to see the way the athletes lived while in Beijing.

L & S: *Do you anticipate having an Olympic gold medal changing your athletic or personal lives?*

SBT: I don't think my life has changed since the meet. I keep telling people that I've just had a busy couple of weeks. I still have more meets this year and have been training and lifting like before. My life is now more on display to the public, and I have a platform now to speak about my faith and be an inspiration to young athletes coming up in track and field. I want to leave a legacy not only in throwing but also in character. The gold medal is not going to be what people remember me for. It will be the message that I brought with me and how I showed love and passion for my sport and for life. *L&S*

SUCCESSION PLAN

BY GLENN THOMPSON

Estonia's Gerd Kanter made the leap from promising young contender, to top of the heap, by taking the 2007 World Championships discus title in Osaka. In the process, he supplanted Lithuanian Virgilijus Alekna, the two time defending Olympic champion.

Kanter cemented his status in Beijing by winning the biggest prize track and field has to offer. Kanter took some time to talk with Long & Strong about his victory, and plans for the future.

Long & Strong: *What was your mental approach to the competition coming into Beijing? Did you prepare any differently than you did for Osaka?*

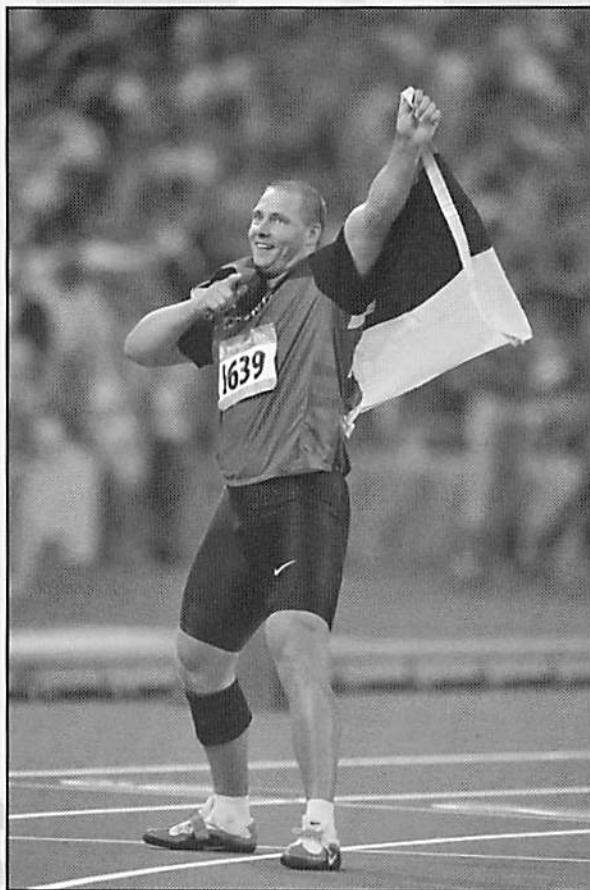
Gerd Kanter: My overall preparation for Beijing was based on the last three years experience. So as a World Champion, I could not think less than first place, and to do so I had to prepare to throw very far. I set my goal very high, thinking I had to throw 72m to win. My motto has always been to think big, and it works. Even though I did not throw 72m, I still won. I have to say that I was disappointed in my result, because my minimum goal was to set a new Olympic Record. Looks like I have to work hard next four years and try to do better distance-wise in London.

L & S: *Were you concerned about your relatively slow start during the preliminary throws of Finals? Did you make an adjustment before the fourth throw?*

GK: No, I was not. The only thing I did not like was first throw of finals. My strategy for the finals was to get a decent throw in the first round; a distance what would sure to make the top eight. So my plan was to throw 64m+ in the first round, then improve a little in the second round, and then attack at the third round. Because my first throw did not succeed, everything was postponed by one round. I

did not make any adjustments before my fourth throw. I just knew that if I hit one throw properly, it was going to fly far.

L & S: *When your 68.82m left your hand, did you know it was a good throw? What did you think when the distance was displayed?*



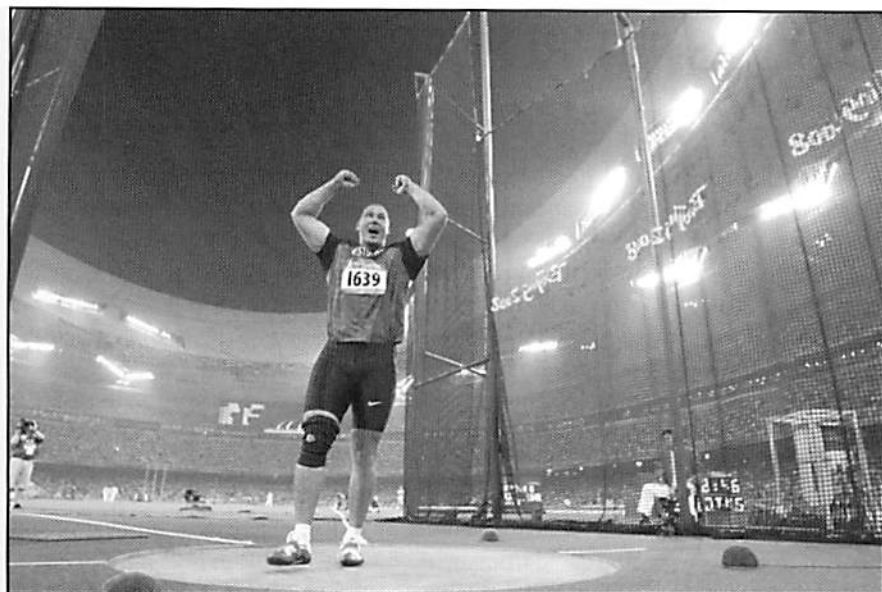
GK: After discus left from my hand I felt that I got some power in to it, but it landed to the left side of the sector, so I could not see exact distance. I knew that it is good enough to take a lead and get a medal, but to win? When the distance was displayed, I was sure 68.82m meant at least silver, because I could not see anybody, beside Alekna, who could throw further.

L & S: *Can you recount your victory celebration/sprint?*

GK: In Osaka I was very disappointed the officials stopped my victory lap very early. So in Beijing I was really enjoying my victory lap. After my last throw I just ran to hug my coach, physiotherapist, and training partner. It was not my victory; it was our victory. Estonian national

flags were all over, because there were about 300 Estonian fans. I was just celebrating and having fun. When I was almost done, I saw sprinting blocks on the track, which were left from some early sprints. I was inspired at the moment to do some flag sprinting. I am used to sprinting and my personal best at 100m is 11.2. No doubt that many people noticed, and we got some attention for throwers. When I finished, I just decided to imitate the fastest man on earth, Usain Bolt.

L & S: *Can you tell us about competing in the Olympics? What is the experience like that an average thrower would not realize? Did you feel a great deal of pressure? Is it challenging to mentally shut out the crowd, photographers, television cameras, officials, etc?*



GK: Because the Olympics are the biggest sports event in the world, it is every athletes dream first to participate at the Games, and second to become the Olympic champion. But there are not many opportunities to do so, because the Games are every four years. Even though I can classify myself as an experienced athlete, I felt a lot of tension on the field, and it seemed everyone did. Because the next chance comes again in four years, everybody tries as hard as possible, but sometimes too hard. Most of the athletes are in very good shape, and if it would be a regular competition, the results would be totally different. The mental pressure is great, and many athletes cannot deal with it and choke, like I did in Athens in 2004.

L & S: Tell us about your reception once you returned to Estonia. Are you the most popular athlete there?

GK: It all started at the airport when I got back from Beijing. There was big reception at the Tallinn Airport with many speeches from the Cultural Minister, National Olympic Committee, sponsors, former school principals, and friends. The day after we had a traditional reception for all medal winners from the Games at Old City. Two of our rowers and I were driven thru the city in convertible cars to Old City's main square. We got carried on shoulders to the stage, and couple of thousand people welcomed us with big applause. We welcomed the

President of Estonia, general speaker of Parliament, etc. We all sang together, and everybody enjoyed the positive feeling.

L & S: Not all that long ago, Alekna seemed invincible. With your win in Osaka, and now again in Beijing, you appear to have claimed the mantle of the world's best discus thrower. What are your future competitive plans?

GK: I have the two most valuable titles from the two previous years, but I want more. I am very motivated for next four years to win everything possible. But the thing that makes me work hardest is the world record. I am at the best age for throwers, and I feel that if I hit a good throw in very good conditions, I can break it. *L&S*

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Olympic Silver Medalist, NCAA and USA National Champion and WR Holder

RINK BABKA: DISCUS THROWER

BY BRAD REID

With the penning of this article, Richard "Rink" Babka becomes the fourth of six throwers I have interviewed, or otherwise written about, all competitors at the 1960 Rome Olympic Games, America's great triumph of world throwing hegemony when a half-dozen Americans swept all available medals in the men's shot put and discus events. It was never better before; it has never been better since. All able-bodied throwers should stand and salute collectively: Al Oerter, Rink Babka, Dick Cochran, Bill Neider, Parry O'Brien, and Dallas Long. These were all, to a man, very special athletes, and with Rink Babka I have now had the privilege of covering all but Al Oerter and Bill Neider. It had been my thought for some time that Al Oerter's media coverage, owing to his four consecutive Olympic gold medals and his successful middle-aged athletic comeback, was so extensive and his story was so well-known, that I could not offer any additional insights, and I disdain writing biographies that simply post rote statistics. Alas, the great Al Oerter has now left us. I do hope to locate and interview 1960 shot put gold medalist Bill Neider soon, my remaining biographical target among the six great pillars of America's throwing perfection. But, first, what of this giant of a man, Rink Babka? And, with Rink, I must admit that I cannot escape more than a bit of Al Oerter's history too, so entwined were these two friends and competitors. No honest coverage of one could possibly exclude the other.

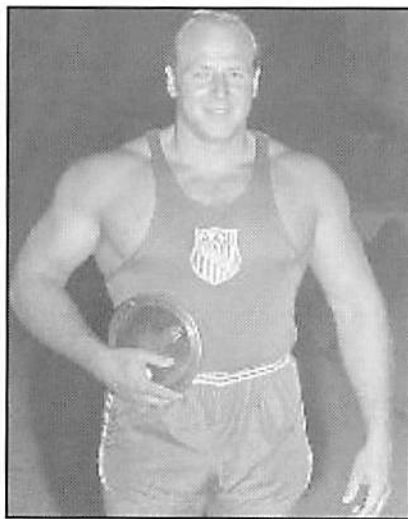
A Fortuitous Move

Rink spent the first dozen years of his life in Wyoming, then and still an expansive, wide-open land ready to challenge a growing young boy, but with severe winters and a hardscrabble work ethic orientation over the Great Depression and World War II years of the 1930s and 40s; it was not an environment leaving much left-over energy for the sunny sports recreation Californians enjoy almost year-round as a birthright. When the Babka family moved to Palo Alto, California, in 1948, it was a real eye-opener as a young Rink first noticed a whole different emphasis on sports and outdoor recreation. With the war finally over, couples with young children in tow were outside everywhere enjoying the parks, playgrounds, beaches, and sports facilities. Into this tableau, appeared one Rink Babka. Anyone who has ever seen Rink knows he is the recipient of some very powerful Eastern European (Czechoslovakian) genetic traits as he would ultimately mature into a 6'5" 275 pound plus discus thrower with accolades earned in football, baseball and basketball, too. Rink

had just been introduced into an environment where he'd excel at both sports and academics. The famous Joseph Campbell said people were at their best and their happiest when they found and then "followed their bliss." But, sometimes one doesn't have to seek their life's path so much as they are dropped on it. Rink Babka, with his broad muscular frame and natural athleticism wasn't going to go unnoticed by discerning and observant coaches, so Rink became a multi-sport champion. As it turned out, he was born for such things.

Early Prowess

The very earliest notation of Rink as a discus thrower I could find came from an old file I dusted off in my archives dating as far back as May of 1954 when Rink, nearing high school graduation at Palo Alto High School, threw the 2 kg. discus 148-2.75 at a College Discus Exhibition. Rink was already as good as all but the very top collegians. His precocious 2 kg. mark along with his California High School discus championship title would rank him as one of the top prospects in the nation for collegiate track & field programs. Rink accepted an athletic scholarship to Menlo College, then an all men's college, and his early successes there (California and National JC Championship titles) would quickly propel him onward and upward to a full multi-sport scholarship at the University of Southern California.



Babka's physique would be world-class in any era.

It would be at USC that Rink would master the discus throw and go on to become an international figure in the world of sports for the next thirteen years. Speaking once more of those great genetics he possessed, it was while at USC in the late 1950s that Rink Babka would anchor one of the then popular "fat man's" relays at a USC/UCLA dual meet. One eye witness to the relay noted that seeing the 275 pound Rink, sporting only a 36" waist, actually making up ground on the legendary decathlete,

Rafer Johnson, in the 4 X 110 relay was quite shocking. The big man's athletic prowess while at USC was staggering, though suffering a serious knee injury would focus his efforts down to just the discus event as the other team sports fell away. The discus event alone, though, would be enough to establish Rink as a legendary figure among USC athletes.

1956...

Rink carried the promise of his first of three West Coast PCC Conference (the predecessor of today's PAC-10) discus titles to a berth on USC's trip to the 1956 NCAA Outdoor Champi-

onships at Berkeley, California. There, he would battle two cross-town rivals from UCLA, Ron Drummond and Don Vick, and another athlete almost exactly Rink's age, a young man throwing for Kansas named Al Oerter. Oerter was the pre-meet favorite owing to his 183-5 best effort coming into the meet. But, after the preliminaries, Drummond led with 173-0.5, Bob Van Dee (of Oklahoma) was second with 167-10.5 and Oerter was trailing back in third place at 167-8.5. Rink came out of the preliminaries at 164-9 earning a spot in the finals but needing to advance in order to earn a medal placing and more valuable points for his team. Ron Drummond did not improve in the finals, Oerter only slightly so; but two others, Don Vick and sophomore Rink Babka, improved with throws of 171-5 and 170-9.5 respectively to move up into the silver and bronze medal positions. Al Oerter finished fourth behind Rink in their first national match up with a throw of 168-9. Throwing as a sophomore, Rink had narrowly missed a NCAA discus title by a span of only twenty-seven inches.

But, the discus thrower of 1956 that history would most fondly remember would be Al Oerter. Even after a sub-par performance at the NCAAs where he failed to place in the top three, Oerter went on to earn a berth on the 1956 Olympic Team placing second at the Trials to Fortune Gordien, then easily outdistanced his teammates and all other world throwers winning the first of his four consecutive Olympic gold medals. Rink, suffering from an abscessed tooth, placed eighth at the Trials and failed to make the '56 Olympic Team and remained at home. The team would be Fortune Gordien, Al Oerter, Ron Drummond (who withdrew from the team) and replaced by Des Koch for the final berth. There would be no trip to Melbourne, Australia for Babka, so he'd have to set his sights forward to Rome in 1960.

1957...

In my recent *Long & Strong* biography of L. Jay Silvester (January 2008, Vol. 10, Issue 3), I wrote of the reason for Silvester's absence from the 1959 NCAA Outdoor Championships. Similarly, as I studied Rink Babka's NCAA Championships history, I couldn't help but notice that he wasn't listed, nor for that matter, were any other USC athletes in the 1957 NCAA Outdoor Championships results. What happened to Rink's junior year of eligibility? A quick study of old news-



paper archives helped me locate the culprit: USC had been given a one year NCAA suspension owing to a rules infraction whereby some wealthy USC alumni were passing money to a few USC athletes in sort of a ticket-for-money scheme. When the author asked about the 1957 circumstances, Rink replied "Everybody hated SC, still do." Rink's point was that USC, Notre Dame and a few other powerful and dominant collegiate sports programs were under constant scrutiny and a small group of envious individuals had been targeting USC for years looking for any possible rules violations. This as it turned out would be it, USC was disciplined, and Rink Babka, not a party to the violation, was unable to represent his university at the 1957 NCAA Outdoor Championships. A second NCAA Championships match-up with his new friend and rival, Al Oerter, would not occur. Rink would win his second West Coast PCC Conference discus title but, alas, Al Oerter would capture the 1957 NCAA discus title by a margin of almost fifteen feet as he went largely unchallenged. Rink would have only one remaining chance at securing a coveted NCAA discus title. He'd have to wait... yet again.

1958...



By 1958, both Rink Babka and Al Oerter were in their final seasons of collegiate eligibility and one of the greatest discus competitions in NCAA championship meet history was about to take place. Rink had won a third consecutive West Coast PCC Conference discus title and was concluding a great season where, as it later turned out, he would go on to be ranked as the number one discus thrower in the world; and, Al Oerter was his usual formidable self and would ultimately be

number two in the world discus rankings. The meet would be held at Berkeley again (University of California, Berkeley, Edwards Stadium) as it had been in 1956. Al Oerter was the defending NCAA discus champion having won the previous year with a throw of 185-4; and, earlier in the 1958 season, Rink Babka had established a new discus record at Edwards Stadium with a throw of 186-8. For more context, the discus world record was then held by Fortune Gordien at a distance of 194-6, so Rink and Al were both on the very cusp of setting a new world record. Too, there was a broader aspect to their important competition as both USC and Kansas had fielded extremely strong teams and were vying for the 1958 NCAA Championships Track & Field team title. This would be a contest to remember. In the qualifying rounds, Oerter led the charge with a throw of 186-2; he would not better the mark in the finals. Rink found himself in second place with a throw of 184-7 and L. Jay Silvester sat back in third place at 174-7. In

the finals, one of those strange things happened as Rink improved over his qualifying round with a toss of...186-2. Rink had tied his friend and rival, Al Oerter, and the two young men would split the 1958 NCAA Discus title, each earning a full 10 first place points. Silvester would improve to 181-8 to hold on to third place.

As for the very important team points, every point was needed as USC would go on to win the team title over second place Kansas 48 to 40. There was little room for error. Few discus throwers ever got the better of Al Oerter, but in their only two NCAA confrontations, Rink would exceed Al by the margin of a single placing. Too, Rink would go on to win the U.S. Nationals just a few days later with a meet record of 187-10 easily outdistancing Al Oerter's second place throw of 181-6. 1958 was a very special year for Rink Babka. He was the best discus thrower in the world!

First Beyond 200 feet... "Overshot the Range"

I should note that the Oerter-Babka friendship/rivalry had another dimension as Rink threw the first 200+ feet throw at a March 22, 1958 meet in Apple Valley, California. Several throwers had been closing in on the mark as far back as Sim Iness (1952 Olympic Gold Medalist) in practice throws during 1953 and 1954. Fortune Gordien and Al Oerter, too, were knocking at the door, but no man had produced the result in a sanctioned meet. The only requirements for either Al or Rink or a handful of other world-class discus throwers to exceed 200 feet were a favorable wind and a good day of competition. Alas, Rink's Apple Valley effort was adjusted to a lesser distance best described in the March, 1958 *Track & Field News* in an article titled "*Babka Does 198'10 -or so.*" His 202-3 tape-measured distance would not be counted as such nor promoted forward for world record ratification by the West Coast AAU as the throwing site had issues beyond Rink's control. Then, in the very next month's *Track & Field News*, April 1958 issue, an article titled, "*Oerter Whips Disc 202-6*" would appear. Oerter's throw too, literally days after Rink's, would not be ratified as a world record and it would be Al Oerter four years later in 1962 who would establish the first officially ratified 200+ feet throw. I uncovered a clearer and official explanation of what had happened to Rink's and Al's 200 feet plus throws in a June 23, 1958 issue of *Sports Illustrated* where it described the barrier breaking historic throws thusly:

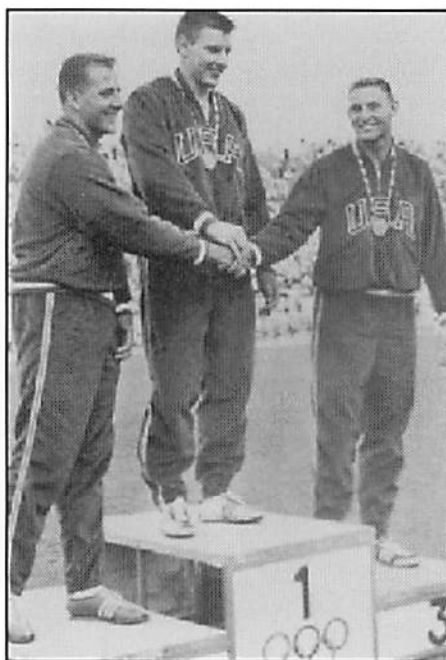
"The flying saucer brigade is headed by two young men who have sailed the discus 200 feet. Unfortunately, Rink Babka of USC overshot the range and dropped his discus

into a drainage ditch and Al Oerter of Kansas was throwing downhill, so neither throw can be recognized as a record."

Babka had "overshot the range," that is, he'd thrown beyond the length of the landing area of the field. What an irony of fate as if the gods of sport were amusing themselves by toying with the conditions of mortals struggling with mile-stones! In private conversations between the two friends many years later, each man conceded to the other the manner in which they could both rightfully claim the "first over 200 feet" record. After all, they had shared the 1958 NCAA discus title, so why not bragging rights for the first 200 feet discus throw, too!

1960... Rome near at hand

By August 12, 1960, Rink Babka had moved to the top of the discus rankings with a world record throw of 59.91 meters, just shy of the first 60 meter mark. Rink was ready to make amends for missing his 1956 Olympic Games opportunity and he would go into the 1960 Rome Olympics as a pre-meet favorite owing to his win at the Trials. Rink had defeated Al Oerter handily at the '60 Trials with a Trials record throw of 192-3.5 and was strongly positioned for a big day. The placings from the 1960 Trials were as follows: Rink Babka, Al Oerter, Dick Cochran, and then L. Jay Silvester.



Rome...

The 1960 Olympics would be the venue of a "good sportsmanship" story that has been written about hundreds of times over the ensuing years, and most recently retold in multiple obituaries reflective of Al Oerter's Olympics mastery. I wanted to know from Rink if the story was essentially accurate as it had been told countless times. Al Oerter had thrown one practice toss before the qualifying rounds beyond Babka's world record but found himself trailing Babka by 15 inches, 190-4 to 189-1 late in the finals. Well, earlier in the competition, Rink noticed that Al was struggling. As Rink described it to me, Al Oerter had a tendency to drop the discus tightly on his hip and carry his left arm down and hold it in rigidly to his body. If Oerter forgot to "open up" before his release and let the discus flare out and away from his hip, he couldn't get a good flight on the discus nor could he get any power into the throw. Babka advised Oerter regarding his technical flaws, Oerter made the appropriate adjustments, and then threw 194-2 for his second consecutive Olympic record, surpassing Rink for the gold medal and leaving him with the silver. Rink commented, "I wanted to help Al and Dick Cochran, too; I didn't want or expect either of them to beat me." Rink chuckled and said that for there to be someone like Al Oerter,



Since retiring, Babka has experienced similar success in the business world.

there had to be a foil; you know, a character that contrasts with another character. Al Oerter, of course, didn't have a single foil but many: Fortune Gordien in 1956, Rink Babka in 1960, Ludvik Danek in 1964, and L. Jay Silvester in 1968. Rink joked that he and Al were like "Frick and Frack" and I suppose Oerter's Olympic successes naturally left more than a few great discus throwers feeling somewhat abased. But, the story of Rink's good sportsmanship will live on as long as the story of Al Oerter's four consecutive gold medals is told, and that will be for a very long time.

Closing it all out...

Rink Babka managed to stay competitive in the discus until 1968 matching the longevity of Al Oerter's prime throwing career year-for-year. Injuries and misfortunes would plague the giant now and again, and Rink failed to make return trips to the Olympics in 1964 and 1968. At the 1964 Olympic Trials, the order of placing was L. Jay Silvester, Al Oerter (his third second place finish in a Trials), Dave Weill, and then Rink Babka in fourth just missing the team. A groin injury suffered in 1968 before the '68 Trials, when he was throwing the longest throws of his entire career, would conclude competitive athletics for Rink Babka. At the 1968 Olympic Trials, the order of placing was L. Jay Silvester, Carlsen, Al Oerter, Bill Neville, and then Rink Babka in 5th.

Rink Babka's last U.S. Nationals competition occurred in 1968 and he placed fourth with 186-1, this after the following long string of successful U.S. National competitions:

1956	171-01	5 th
1957	180-3.5	2 nd
1958	187-10	1 st
1959	177-10.5	5 th
1960	185-05	3 rd
1961	186-06	3 rd
1962	193-4.5	2 nd
1963	188-5.5	2 nd
1964	186-07	5 th
1965	183-09	5 th
1966	191-02	2 nd
1967	195-02	3 rd
1968	186-01	4 th

Rink Babka: Historically, How does Rink Babka Rank?

On the World Rankings Index for Discus Throwers, the All-Time Scoring Leaders look like this:

1. TIE - Jurgen Schult and L. J. Silvester with 107 points;
3. Al Oerter with 104 points;
4. tie, Lars Riedel and Wolfgang Schmidt with 103 points;
6. Ludvik Danek with 101 points;
7. Adolfo Consolini with 96 points;
8. John Powell with 89 points;
9. **Rink Babka** with 88 points;
10. Fortune Gordien with 84.

On the basis of his annual world rankings, Rink Babka ranks as the #9 discus thrower of all time in world rankings, and the #4 ranked American discus thrower of all time. Rink Babka's World Rankings by year were

1957 (2), 1958 (1), 1959 (4), 1960 (2), 1961 (3), 1962 (4), 1963 (5), 1964 (5), 1966 (3), 1967 (2), 1968 (7).

And, his U.S. Rankings by year were

1957 (2), 1958 (1), 1959 (2), 1960 (2), 1961 (2), 1962 (3), 1963 (3), 1964 (4), 1965 (4), 1966 (2), 1967 (1), 1968 (4).

I should concede to readers, yes, so I have recorded some of Rink's statistics after all. They are simply too good and took place over such a long career not to reflect on them. Rink Babka had done it all: an NCAA title helping USC secure its team title in 1958, a U.S. National Championship title in 1958, a number one world ranking in 1958, first thrower over 200 feet un-ratified, a ratified world record in 1960, a 1960 Olympic Silver Medal, history's ninth-ranked discus thrower in the world and fourth-ranked discus thrower in the United States, and a personal best throw of 209'9" toward the end of a very long throwing career. Importantly, he managed all of this over arguably the most competitive era of discus throwing in world history. Few throwers have enjoyed longer or more prosperous careers as discus throwers.

For the author, Rink's enduring contributions to our sport are indelibly linked to his legendary Oerter battles where, no, he actually didn't always come out on the short end. Rink Babka's record is more than admirable, it is staggering. Perhaps more important as a legacy, I think, is that Rink Babka along with five other Americans did the near impossible in 1960. Each held up his end of a tough team bargain by bringing all six Olympic Medals back home to the United States. Records are meant to be broken, but going six for six in the men's shot and discus at an Olympics may stand for generations to come. With the completion of my athletic biography of Richard "Rink" Babka, I believe I can also add Al Oerter to my "completed" list. Five out of six, I'll count it as such. Now, can any readers help me make a contact with the sixth remaining pillar of throwing, Bill Neider? *L&S*

[Editor's Note: You can learn more about Rink Babka at <http://www.rinkbabka.com>]

TARTAN TERMINATOR

By MARK VALENTI

Everyone has seen that guy. You know who I am talking about. The guy who has all the tools, but just doesn't have the talent. Maybe he has all the athletic ability, speed and strength, but he will never get the technique down.

As a thrower, Sean Betz is your worst nightmare. Betz has it all. He's a giant to start with, but there is more. He's quick; lightning quick. And he's strong; super strong. And to top it all off, he has an advanced thrower's grasp on technique and training, and a brain that seems to be able to make technical changes at a moment's notice. Slap that together, and you have the Highland Games equivalent to the Terminator.

This is Sean Betz, your 2008 World Heavy Events Champion!

L&S: First let's start with the basics, what are your age, height and weight?

SB: I'm 31 years old, 6'5", and 295 lbs.

L&S: What do you do for a living?

SB: I am a personal trainer and pro Highland Games athlete.

L&S: How did you get involved with the Games?

SB: There was a games being held near Greeley, Colorado by Karl Dodge. I had just finished my collegiate career and decided to give it a try. I entered as a C thrower and moved to the A's the next weekend, in Kansas City.

L&S: What sports did you participate while in high school?

SB: Football, basketball, track and baseball.

L&S: What were your PR's in the throwing events in high school and College?

SB: In high school, it was 53' in the shot and 150' in the discus. I only threw the discus two years in college, and I threw right at 55' in the shot and 162' in the discus. I didn't know what I was doing, and I wasn't very strong. I consistently threw 54' and 160' my senior year, which was good enough to place high at the small college level. I

threw in the 180's a couple years after college when I was coaching.

L&S: What college did you attend, and what sports?

SB: Midland Lutheran College in Fremont Nebraska, where I threw the shot and discus. I was an all-American 3rd place my senior year in the discus, and 7th in the shot. I could have played football and basketball, but decided I was done with those.

L&S: What are your PR's in the heavy events?

SB: 43'8" - Braemar, 55' - Open Stone, 45' - 56# Weight For Distance - 92'3", 28# For Distance - 120'10", Heavy Hammer - 148', Light Hammer - 16'10", Standing WEIGHT-OVER-BAR - 19'5", Spin - 34', 20# Sheaf - ???

L&S: We saw some huge numbers coming into Bridgeport (2008 World Highland Games Championships) this season. Did you feel confident that you would win or medal at Worlds?

SB: I was very determined in every competition leading up to Worlds, and at Worlds. I knew that I would do well, but I also knew that I would have to place high in the caber to have a chance to win it.

L&S: What is the goal for the upcoming season?

SB: I would like to break the 28# For Distance record and hit 150' in the light hammer. Of course, I would feel privileged to win the Celtic Classic.

L&S: Let's talk about your hammer in the last couple of years...WHAT THE @\$%!!!!????? I will reword that - what has taken you on a journey to such huge marks? Anything that has helped you throw it farther, or is it just a natural progression?

SB: It started a couple years ago when I started throwing with two winds. It taught me how to lift and lock at the point of release, while staying long. With two winds, I needed to generate a lot of speed from the very start. Last year I went back to the extra wind, and slowly began to mesh it together. Then I started getting the feeling of catching the hammer behind you and really accelerating the ball at the right point. Finally, I trusted myself enough to just let go and go as fast as possible after the initial wind. It's shocked me as well. On average, my heavy hammer is up from 107' to 114', and my light hammer is up from 129' to 142'.



Sean Betz

L&S: *You have shown yourself to be one of the best stone putters in the country, if not the world right now. I have seen you over the years glide and spin. You are gliding now. Were you a glider in high school and college? Why do you glide now in the Highland Games?*

SB: I was a glider in high school and college. I switched to the modified South African my second year in the Games as an Amateur. It was a fun challenge to work on a new technique, and I threw 54'5" in 2004 with the modified South African. I switched back to the glide in '05 before the Minnesota Games, because I was frustrated with my stone. I ended throwing 54'6" at the Minnesota Games in the glide, which was a new PR. By doing the spin for a few years, it taught me more about separation and torque, and I could apply it back to the glide. I like the glide now because it translates better with the Braemar (standing) throw, and I know if it improves, so does my full glide. Gliders are usually more consistently around their PR than the spinners are. Consistency is the name of the game in the Heavy Events.

L&S: *What is a typical week like for you in the off-season? How many days a week are you throwing and lifting?*

SB: Since it's cold and snowy in the winter, I just lift. I either lift three days of whole body workouts, or four days of upper/lower split, or sometimes a push/pull split. I usually change it every three weeks or so.

L&S: *Can you give us your philosophy for weight training for the Heavy Events?*

SB: Get strong at the core lifts (hang clean, hang snatch, push press, front squat, back squat, deadlift, military press), in the off-season.

Pre-season and in-season, I start doing close-grip snatches, and narrow the lifts down to 2-3 a workout a couple times a week with the introduction of throwing. I did almost no twisting exercises or specific ab movements this off-season. All my throws were better than they've been at the start of any previous season.

I think the deadlifts, squats, cleans, etc., strengthened everything beyond what I'd experienced before. I just did the lifts that pertained to strength for the throwing events. I squatted and pulled at least two times a week, usually three times a week for some type of squat. In-season, I lift or throw on Tuesday and Wednesday, and then rest for the Games on Saturday.

L&S: *Can you give us a typical week's workout?*

SB: This would be a pre-season workout:

Day 1: Close grip high pull from hang super-setted with close-grip snatch 6 sets of 2, Snatch-grip deadlift doubles up to a decent weight, back squat 5 sets of 5 reps with

bodyweight on the bar-try to complete all 5 reps in 5 seconds, rest a day or so

Day 2: Standing press to a heavy double mesh into push press for a heavy double, front squat 5-4-3-2-1 rest a couple days

Then I would do a lighter day of maybe, back squat 3x3 with 70-80%, hang clean to 85% for a single or double, steep incline press 3x5.

L&S: *Do you feel you need to train in the weight room differently than someone who is shorter like myself, Ryan Vierra, or Kerry Overfelt?*

SB: Yes I do. I think that pulls are even more effective for a taller thrower, like myself. I need to use more of my legs hips and back and I'm pulling the bar a further distance. Pulls for a taller person are more stressful on your body, thus they may give you more of a training effect.

For shorter throwers, starting strength is more important, because you have less distance to accelerate the implement it needs to start at a greater speed. If a taller thrower just gets stronger, he can use his levers to keep throwing farther, with good technique.

L&S: *Did you have any role models coming up on the circuit? Any of the guys you looked toward for technique, training, throwing tips? Maybe someone you just admired as a thrower.*

SB: Ryan Vierra is the obvious choice as a role model. He is the Highland Games to American throwers. I've learned a tremendous amount from watching him and talking with him. I feel lucky to be competing on the same field.

I think I throw more like Matt Sandford. I think his technique in the Weight-Over-Bar is the best by far.

Another thrower that comes to mind in Overfelt. We competed together many times as amateurs and pros. I respect the way he took his weakest events (hammer, stones) and made the hammer probably his best event and has improved his stone tremendously as well.

L&S: *What do you love about the Highland Games?*

SB: More than anything the competition and challenge. I don't think of the games as a show, but a sport. I don't go to renaissance festivals. I'm not into weird outfits or being a showboat on the field. I like the throwing and hanging out with the guys. I respect the Scottish culture, and the rest of what goes on at a games, but I'm a thrower and that's what I do.

There is nothing like the day of a big Games like Pleasanton or the Celtic Classic. You get up in the morning and realize how lucky you are to be able to compete in this sport at this level. ***L&S***

Identifying Key Stretch-Shortening Cycles In Discus Technique (Part 2)

THE STRETCH-SHORTENING CYCLE CONCEPT

BY BRYAN NEIGHBOUR, SR. THROWS COACH (ATFCA: LEVEL 5), MENTONE A.C.

The following sections examine where SSC is involved and how the phases link to generate optimum power. No single section of discus technique can stand-alone; every phase affects the next. To understand this interdependence, the following discussion frequently revisits an earlier phase to link and elaborate upon successive phases.

The thrower's action is universally considered as a series of separate key phases: preparatory, entry, transition and delivery. The instances that define these phases include:

- P₀** Farthermost position and moment for the discus behind the thrower at the end of the last clockwise preliminary swing.
- R₀** Moment at the rear of the circle when the right foot leaves the ground.
- L₀** Moment at the rear of the circle when the left foot leaves the ground.
- R₋** Moment near the centre of the circle when the right foot contacts the ground.
- L₋** Moment at the front of the circle, when the left foot contacts the ground.
- O₋** Moment when the discus leaves the thrower's fingers.

*A key feature of differences in the alignment of the shoulders, hips and throwing arm with respect to each other axis is the **angle of separation**: a general term to describe the angle between two axis or lines (i.e. between shoulders and hip lines; or between shoulders line and discus-arm).*

Preparatory phase (P₀ - R₀)

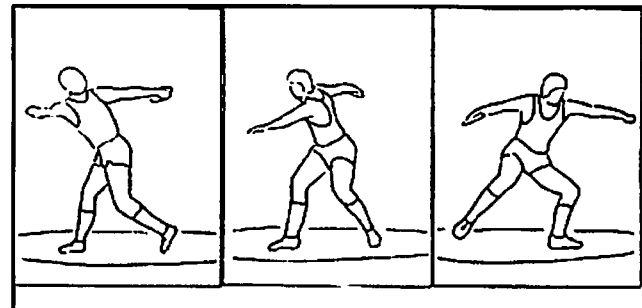
This phase includes moving from the farthest clockwise position of discus, during the last preliminary swing (extreme clockwise limit of the wind-up) until the right-foot leaves the ground.

Action:

Movements include turning left, while loading the left-foot, lowering, sitting backwards, and leaning slightly left as preparation to counter to the right-leg action. Loading is usually complete by the time the chest has turned to face about 45° counter-clockwise from zero (#3 R₀). At that moment the right-foot will lift-off.

The preparatory phase starts (P₀) the instant the back-swing reaches its preferred limit. As soon as the athlete senses this position, that moment should be used as a trigger point to commence loading on the left leg.

The combination of the subsequent weight shift to load the left foot and the movement of the right hip forward as a counter-clockwise movement to the clockwise momentum of the discus also serves to create the tension that maintains the position of the discus in the trailing right-hand.



#1 (P₀)

#2

#3 (R₀)

Figure 4. *Preparatory phase. In frame #1 Wolfgang Schmidt has stopped rotating away (winding-up) and is about to commence the counter-clockwise turn towards delivery.*

As the system starts to turn towards entry, a natural pattern is for the discus arm's elbow to point backwards, increasing the range of the shoulder joint, effectively increasing the separation angle between the shoulder-line and trailing arm.

A correctly rotated humerus is evident by looking at the orientation of the elbow joint (see fig. 7 as examples). This orientation is critically important later in the delivery phase where optimal separation between the shoulder-line and the extended discus-arm will maximise the delivery path and final acceleration of the discus.

As soon as entry begins, it is also important to allow the discus-arm to trail along behind the shoulder through the preparatory, airborne, transition and the early part of the delivery phase. Even though there is muscle tension and muscle stretch in the right-pectorals, shoulder and arm, due to the carry and the system's rotary motion, these muscle groups must not try to accelerate the discus until late in the delivery phase. To do so would move the discus arm alignment nearer to parallel and even beyond the shoulder-line, creating major problems later in delivery.

Athletes should regard the discus as 'a passenger, towed along behind the right-hip and right-shoulder'. Similarly the shoulders and torso should also remain relatively passive, while turning, aided by the initial momentum of the system and being towed by the lower limbs.

When examining the figure 5 sequence, this athlete can be seen starting to turn, to load the left-side, and in effect, moving away from the right-foot. By frame #3 the right-foot is about to leave the ground with tension in the right-hip and thigh created by the shift to the right, stretching the right-hip flexors, adductors and quadriceps. This continues after the right-foot lifts until the heel is about knee height (frame #4). By this stage the required stretch has peaked and the reverse movement occurs: the right-leg's stretched muscles

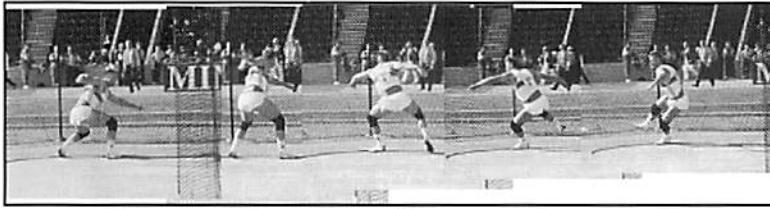


Figure 5. Preparatory phase plus the acceleration of the right leg.

Note in the above sequence that as the athlete turns and loads the left-foot, he moves away from the right-foot creating stretch and hence tension in the adductors and hip flexors of the thigh and right hip. This stretch at the hip precedes the powerful concentric that drives the right-leg swing creating the lower limb momentum critical to increasing the rotary speed of the hips through transition and delivery. Note in figure 5 frames #3-5) that the discus is carried well back, palm down and behind the right hip with both shoulders rolled inwards.

contract to sweep/ kick along a circular path powered by an augmented concentric contraction enhanced by SSC.

This preparatory right-hip and thigh muscle stretch will be felt as a slight muscular restriction caused by moving left and is the 'pre-tension' used to accelerate the right-leg sweep.

The angular momentum generated by the leg swing/ kick has a critical role in subsequent phases..

Entry phase

R- L- (figure 6)

This phase commences the moment the right-foot leaves the ground and ends when the left-foot also leaves the ground. This phase is of critical significance as it generates enormous angular momentum.

Action:

This sequence begins when the right-foot lifts off but in terms of timing, this is only possible when the left foot is fully loaded and the torso has turned to about 45° (i.e., counter-clockwise turn, measured from zero).

Even though the right foot is off the ground and will continue to rise to about knee height, the athlete will feel as it has been momentarily left behind (fig. 5, #4 /fig. 6, frame 3). So as the torso and hips turn away from the trailing right leg, this creates a passive stretch in the upper-thigh and hip (i.e., hip flexors and adductors), increasing and in a sense, priming the limb for a powerful rotary sweep/swing-kick.

The timing of the kick occurs only a moment after right-foot-off, and timed to occur as soon as the chest and hips have turned to about 90° left of zero. The rotary acceleration of the right limb is concentrically driven by the pre-stretched right-hip flexors, thigh adductors and extensors (i.e., SSC), that sweep the right-foot around, forwards, and towards the centre of the circle.

Correct timing is critical so between turning past 45° to reach a working peak at about 90°, athletes should feel as though

they are momentarily 'waiting' until their chest faces 90° before the swing-kick / sweep commences.

The low, wide circular sweep of the right foot is best maintained by leading with the medial aspect of the ankle.

The angular momentum generated by the right leg will eventually be transferred up through the system to accelerate the rotary velocity of the hips, shoulders, arm and the discus. Optimum gains here substantially increase flight distance.

Coaching points might include:

- Turn as a unit and load the left foot;
- lift-off the right-foot relatively early (*spatial reference: when the chest has turned about 45°*); **then wait** until facing left (i.e., 90°) before vigorously swing-kicking towards the left.
- To maximise the angular momentum of the right limb, sweep wide, low and lead with the medial aspect of the knee and right-medial-malleolus (inside ankle-bone) (fig. 5, frames # 4-5) and definitely not with the toes.

When the athlete eventually turns to about 180°, the left-arm's rotary path reverses and swings forward into the running position

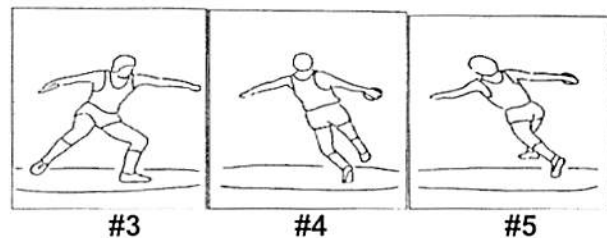


Figure 6. Entry: R- L-

Preparation for take-off

While continuing to turn through the preparatory and entry-phases, the left-hip and knee flex and the ankle dorsiflex. While in this low position, the gluteus, quadriceps and calf muscles are also stretched.

At this point, a popular perception is that the athlete runs and drives; however, the athlete does not require a powerful leap because the usual distance between the athlete's CG shift at take-off and touch-down is only about 0.3m and is completed in around 0.12s. This perception has more to do with the athlete's low position, body angle, the flexed knee, hip and ankle and the muscular tension felt maintaining balance through this phase.

Using the above figures, the flight's average linear velocity is only about 2.5m/s. So very little extra push is required given that athletes have already gained angular and linear velocity while loading, turning and leaning towards the sector-centre, and have also gained momentum transferred from the leg-swing as muscle tension in the hamstrings and adductors start to slow the right leg at the front just before take-off (i.e., transfer of angular momentum and tangential velocity).

Nevertheless, there is some additional left-leg drive; however, the timing is critical just as it must be in the direction of the intended throw to increase forward directed linear momentum and ground reaction on touch down.

While still turning on the left-foot, and about to take-off, the *pre-stretched* left-hip, thigh and calf muscle tension is then *released* rather than augmented by a significant concentric contraction. It still feels like a leap but can be over-stated and detrimentally over-emphasized as a contribution to both linear or angular velocity.



Figure 7. Throwing legends Mac Wilkins and Al Oerter, showing their distinctive interpretations of the leg-sweep, mid-way through entry. While the degree of application is different, the principles are the same: during entry the lower limbs are actively generating angular momentum; the discus-arm tracks behind the shoulder; and the shoulders tracks behind the hips (e.g. Al Oerter). Note the orientation of the throwing arm-elbow: rearwards and upwards twist.

Sub-phases:

A: Descending path of discus to its lowest vertical position.

Towards the lowest point, the discus should continue to be carried palm down (figure 7), with the humerus medially rotated, passively trailing well behind the right-shoulder-line well behind the hip-line.

Key features at lowest point (see figures 7) include:

- the discus-arm and discus tracking behind the right-shoulder and
- carried behind the right hip,
- close to the right buttocks when the chest facing 90-135°.

B: The interval near the rear of the circle when the discus reaches its first minimum vertical height and continuing

until the left-foot leaves the ground, (i.e. take-off).

During this sub-phase, the athlete ***must not deliberately swing the discus upwards*** and instead should continue to passively carry the discus so that it trails the shoulder-line.

From P_0 to early in the delivery its orbit simply follows the circular and linear movements of the shoulders and hips., along a path determined by the inclination of the torso (main axis), shoulders and hips to the horizontal, speed of rotation and gravity. *Note in figure 7 how these discus legends Al Oerter (1956, 1960, 1964, 1968 Olympic discus champion and world record holder 4 times) and Mac Wilkins (1976 Olympic discus champion and world record holder 4 times) both carry the discus in a passive manner:*

These features dominate:

- the discus is a passenger, passively following the shoulder;
- it should not be allowed to move ahead of the shoulder-line or be deliberately swung up or down;
- the discus orbit and path radius are maintained by simply carrying it with an extended elbow and wrist, and towed on a path determined by momentum for the system and axis of the torso, hips and shoulders.

Flight (airborne phase /L- R-)

Commences the moment the left foot leaves the ground (L-) and ends as the athlete's right-foot contacts the ground (R-) near the centre of the ring.

This short leap involves very little extra thrust from the take-off foot, as it is already aided by the angular momentum of the right-leg swing and linear momentum of the athlete-discus system gained earlier while sitting backwards and later, by leaning towards the centre of the circle. However, correct timing for the take-off and direction remains critical to allow the athlete to land with the

- right-foot aligned towards 270°,
- the hips aligned to about 180°,
- the shoulders similarly aligned or just behind 180°,
- the discus arm continuing to track behind the shoulder-line and the right-foot landing under the right-shoulder (fig. 8).

At take-off, the hips should be turned to face slightly left of centre (i.e. towards the left-sector line) (figure 8, frame 20). During the flight, the hips should rotate through an angle of about 80-90° (see hip-line in frames 19 and 21) and finish the flight by striding around and down, with the angle between thighs being about 50-60°. It is important to avoid bringing the thighs *too close together before landing*, as the hips will rotate more quickly, causing excessive hip rotation.

These measures are critical features as excessive airborne rotation (i.e., if the right-foot were to land beyond 270° and similarly, for the hip-line to be turned well beyond 180°/360°) as this would cause the athlete to 'back' into transition and delivery.

When an athlete rotates and lands well beyond 270° , in effect backing the hips and torso into transition, the shoulders and discus arm have also turned closer to release and as a result, the remaining angular path for transition has also been reduced.

It is imperative that this sub-phase is well managed as it sets up the remaining rotary path where the stance is narrowed and rotary/angular momentum is transferred from the right thigh to the hips and torso. Transition enables the hips to accelerate ahead of the shoulders and discus arm, increasing the separation angles for the hip to shoulder-line and shoulder-line to discus arm so any excess airborne rotation will seriously compromise the SSC building through transition.

Similarly, if during take-off (L^-) the athlete has already turned to face well beyond 90° before beginning the right-leg sweep, the athlete will also land too far around, and again the athlete will back into transition.

To avoid backing in to the transition phase, the flight's landing positions should include:

- the right-foot and knee should land pointing towards or close to 270° (frame 21), with
- the right-hip pointing slightly left of the sector centre (i.e. hip-line at about $180^\circ/360^\circ$),
- the shoulder-line to be behind the hip-line (i.e. to feature hip-shoulder separation) and
- discus-arm and discus well behind the shoulder-

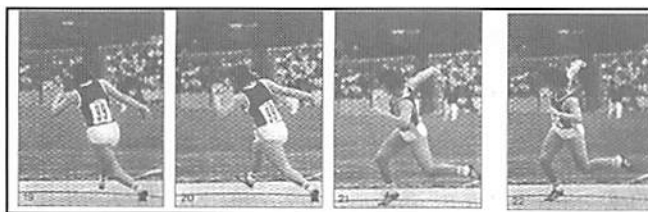


Figure 8. Airborne phase. Moment after take-off to the instant before touchdown (instant occurs between frames 20-21). Note: (#21) foot pointing towards 270° , hips $0^\circ/180^\circ/360^\circ$, shoulders slightly behind hip alignment and the discus arm well behind and separated from the shoulder-line. Also visible is the orientation of the discus arm's humerus / elbow.

line, at about shoulder height, with palm down.

- The right-shoulder should continue to feel like it is rolled inwards allowing the shoulder joint greatest range for near maximum shoulder-line and arm separation (frame 21).

Just before landing, the right-forefoot should be pulled under the athlete so that the athlete's CG lands rearward of the forefoot, allowing a slight lowering of the hips to absorb vertical and some forward speed (i.e., an eccentric muscle action) to begin the *next stretch-shortening cycle*.

Transition Phase ($R^- - L^-$)

Commences the moment the right foot contacts the ground and ends as the left foot contacts the ground.

This phase includes reducing the space between the thighs and feet to increase the angular (rotary) velocity of the hips, which also enables the hip-line to advance further ahead of the shoulder-line (i.e., eccentric muscle action of the torso), before once again moving the knees apart to ground the left-foot.

As soon as the athlete lands (R^-) the right-knee flexes slightly (*stretching the gluts, calves and thigh muscles ready for the vertical leg drive*) then pivoting both horizontally and forward. The right-foot continues to turn on the ball of the foot, enabling the athlete to pivot into the delivery phase, avoiding any tendency to step backward (L^-) into the delivery phase.

The pivot is an extremely fast phase and there is little time to do anything more than

- immediately settling (eccentric contraction / stretch phase of SSC),
- to 'close down' by 'wrapping' the right-arm close to chest and torso, while simultaneously reducing the thigh separation (reducing inertia),
- then almost immediately opening the knees again to allow the left-foot to touch down.

In the instant the system 'closes down' or 'wraps,' the hips rotation will accelerate while the inertia of the discus arm and plate will keep it well back. This should be sufficient to improve hip-shoulder-line separation (*hence the stretch in torso and shoulder musculature*) before opening the knees to establish the throwing base.

Key features:

Landing:

- the right-foot and knee should land pointing towards 270° (figure 9, frame 21), with
- the hip-line pointing slightly left of the sector centre ($180^\circ/360^\circ$), and
- shoulder-line behind, and
- hip-shoulder separation and discus arm and discus well behind the shoulder-line, at about shoulder height, with palm down.
- Right leg to flex slightly to absorb downward momentum and to lower CG.

Pivot:

- On touch-down, momentarily adduct the thighs and
- then almost immediately open the knees for touch down of the left-foot.
- Athlete must pivot into double support for the delivery phase enabling the hip-shoulder-line separation to increase and to definitely avoid stepping backward into double support.

Although popular, stepping backwards represents a major technical error;

- causing the block to commence momentarily too soon. An early block causes the shoulder and arm to catch up to the hips too soon compromising the delivery's shoulder pull and whip action;
- Reduces forward momentum.
- Diminished transfer of angular momentum from the lower body to the upper body.
- Negative effect on shoulder-arm separation angle for the whip (arm catches up with shoulder-line).
- Limits the vertical leg-drive and hence the vertical component of the release velocity.
- Causes problems with the pull, leading to a tendency to release too steep because the athlete's CG remains too far from the front of the base.

Sub-phases:

A: R- to discus high point: Ascending phase of discus path to maximum in the vertical direction of its arc.

While the discus will rise, it must remain behind the shoulder line, and at its maximum height, only rising to a point that is inline with the shoulder-line (fig.9, frame 23). A key feature here is that the discus is still being carried by a passive musculature. The lower limbs and torso are the only body sections actively involved in the acceleration of the system.

B: From discus high point to L-

This is where the discus is still high but descending into the classic power position (figure 9, frame 26) and features *torso tension due to increasing hip and shoulder-line separation; this separation is an essential part of the muscle stretch to feature later in the delivery.*

Delivery phase (L- - O-)

Commences the moment the left-foot contacts the ground and ends when the discus leaves the thrower's fingers.

The left-foot is usually grounded at the front of the ring, slightly left of the sector centre. The off-set position of the left foot relative to the right foot should be just wide enough to allow the right hip to rotate forward and square to the delivery direction.

are beginning to drive upwards, the left-knee straightens and the left-heel drops, the left-foot pulling back against the ground *blocking the left side*, as the right-heel rises and turns outwards.

The vertical drive is aided by the *concentric contraction* of the muscles eccentrically stretched during the right-foot landing and the pivot into the delivery phase; i.e., the *eccentric stretching of the hip, thigh and lower leg extensors* before the muscles *concentrically contract* to impart a powerful upward acceleration.

The vertical drive also contributes to the block by stiffening the left-side.

The significance of the 'vertical drive' is that the legs are mechanically more effective for imparting a vertical-velocity component to the release velocity than adding to the horizontal velocity component. Conversely, the arm and unwinding torso are mechanically more effective imparting a horizontal velocity component to the release than their vertical velocity component.

To impart the most favourable source of vertical and horizontal velocity components, for the best release velocity and release angles, a preferred technical interpretation must reflect the individual's specific physical capabilities.

Athletes and coaches arguing the merit of variations that favour a *fixed foot delivery* or a more dynamic vertical effort by the legs (i.e., a *dynamic delivery*) loosely but popularly described as a *reverse technique*, should always consider whether their preferred model, generates an individually specific, optimum release speed and release angles.

This author favours a dynamic delivery.

Key features:

- The hips continue to turn, accelerating ahead of the shoulders, to face forward, as do the knees.
- The hips are dragging the shoulders and trailing discus around behind the vertical line through the right hip.
- While both legs are turning to the front, the left-heel is grounded; however as the right-hip comes close to square, they begin to drive upwards.
- The right-heel rises further and turns outwards,

- allowing its hip to continue turning and to pull the right shoulder (and discus) forward and square for the whip delivery.

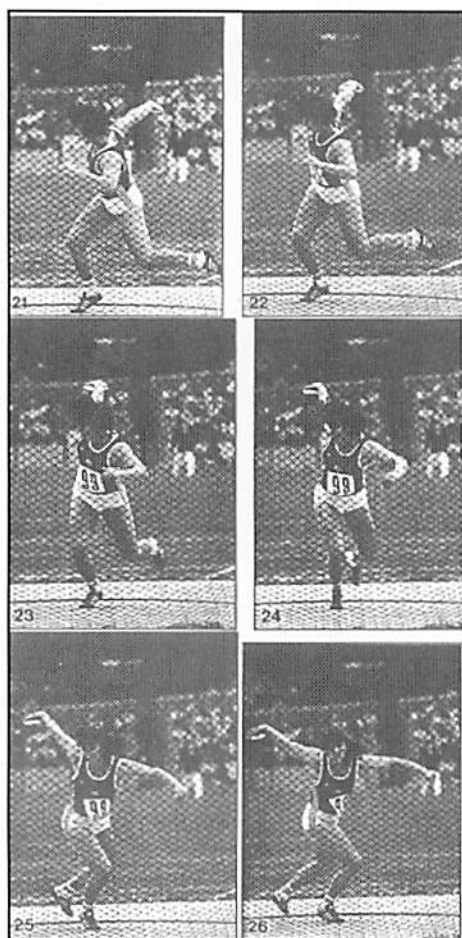


Figure 9. Transition. This athlete attains significant hip-shoulder separation, trailing the discus and maintains arm-shoulder-hip separation through transition.

This continues to maintain the torso's eccentric stretch while also adding a centrally directed force (due to axis shift) adding to the tangential velocity of the discus.

The hips must keep turning to a position square with the sector, but the axis now changes from a central torso axis to a vertical axis through the left-side and a horizontal rotation axis about the left hip. So the right-hip now turns, accelerating to push forwards (Figure 10, frames #8-9) with tension peaking as the hips reach the limit of their pull on the more inert upper body. This is where the hips press forwards and around, maximizing tension ready to commence the *concentric phase of the stretch-shortening cycle in the torso* (frame

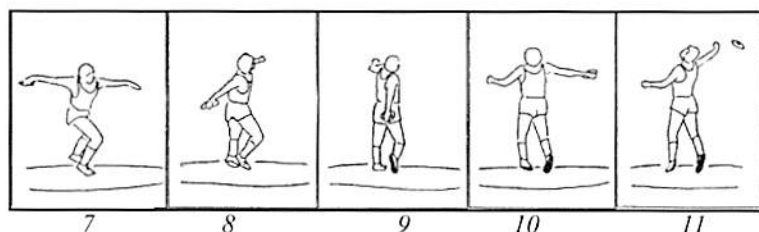


Figure 10. Delivery phase commences with left-foot contact and ends with release of the discus.

#9).

A: Sub-phases: L- - to lowest discus position

Descending phase of discus path, commencing as the left-foot contacts the ground continuing until the discus reaches the lowest orbit position. In this phase the system's CG is continuing to move forwards while the discus is continuing down.

B: Lowest discus position until release (O)

Commences the moment the discus reaches the lowest orbit position and ends when the discus leaves the thrower's fingers.

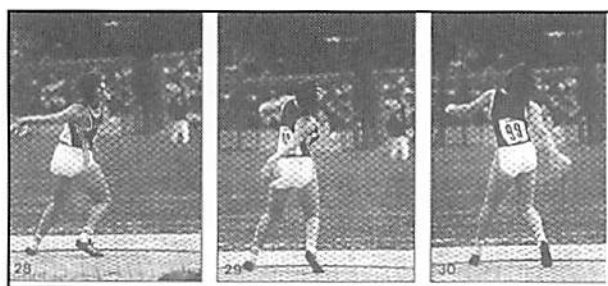


Figure 11 Delivery phase featuring the beginning of the final powerful whip.

gers.

Since the hips are now well forwards and the arm is still tracking well behind the shoulder-line (figure 11, frames #29-30), this is where the hips 'pull' the discus forward over the base, the torso unwinds (*concentric phase of torso musculature*), and the tension of the pull having stretched the muscles of the chest and shoulder, also aided by the backward swing of the left-arm, is now released, with a whip action, driven by the shortening phase of these muscle and groups.

The right-arm whips through using the *stretch-shortening cycle* across the chest, feeding in this augmented power to gain maximum release speed. This 'whip action' combines the rapid unwinding of the torso, the pull with the shoulder and the stretched pectorals along with the vertical leg drive to complete delivery. *L&S*

Editor's Note: This photo sequence and narrative were omitted from Part 1 that appeared in the July issue. This segment should conclude Part 1 (August, 2008) and precede Part 2 in this issue.

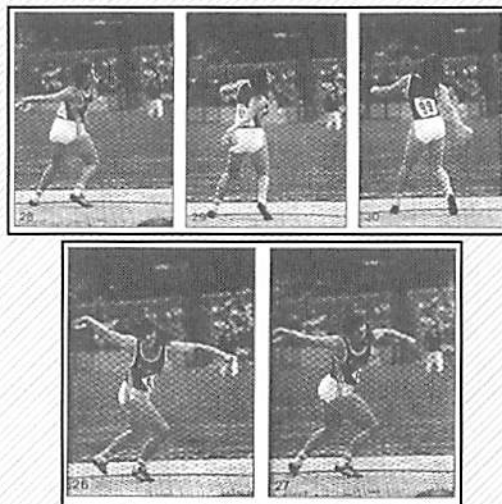


Figure 3. Frames 28 & 29 show the upper body primed and ready for pull and whip release (thrower: Martina Opitz, GDR.) (Photographs: H. Payne, 1985).

This series (figure 3, frames #26-30) shows excellent stretch in the muscles of the torso and shoulders indicated by the hip and shoulder-line separation (eg. #28), the shoulder-line and right arm separation (eg. 29) with the discus arm passively tracking well back behind the shoulder-line (#28-29).

These frames show the hips rotating rapidly to the front, with significant hip-shoulder separation and outstanding angle difference between the arm and shoulder-line (frames #28 & 29), with the discus still passively tracking behind the shoulder. By frame #29, the hips and knees have been allowed to spin through to the front, creating enormous tension between the hip and shoulder lines. The athlete is now primed and ready to powerfully unwind (*concentric phase*) allowing the right-shoulder to keep pulling on the discus before the pre-loaded (*stretched*) pectorals (aided by drawing the left-elbow down and back) and arm muscles to whip the discus through to complete release.

Discus Analysis

GROUNDING VERSUS AIRBORNE RELEASE

The moment of release in discus throwing, after the thrower has reached the final double support, expresses the culmination of all the forces that the thrower has been able to generate during the initial phase in the back of the circle and during the subsequent transition to the middle. Assuming that the thrower has arrived at a satisfactory position to deliver the discus, the question arises as to what would be the most favorable way to do so. Should she strive to keep one or both feet in contact with the ground at the instant of release (grounded release) or should she deliberately jump up and have both feet off the ground at the instant of release (airborne release)? The question is an old one with coaches and throwers following a method of release based on either some "theory" or on "what feels right" for the individual thrower. Some throwers will keep contact with the ground for as long as possible while other throwers will deliberately and actively bring the right foot forward as they are, at the same time, leading the discus to its point of release. The famous American veteran discus thrower, Jay Sylvester (2007) has mentioned that, "there must be a point where leaping into the air and accelerating everything maximally is better than staying on the ground and throwing.... for some of us, may be not for all of us." He obviously preferred this type of release while he acknowledged that it might not be the preferred way for all throwers. Indeed, another famous veteran, Wolfgang Schmidt of Germany, employed the grounded method of release.

However, what happens as the thrower jumps in the air as she tries to release the discus? When a system is in the air, the center of mass loses vertical speed at a rate of 0.1 m/sec., with each hundredth of a second that elapses. By the time the airborne discus thrower releases the discus, the vertical velocity of the system will slow down by about 0.3 m/sec, from an average of 1.7 to an average of 1.4 m/sec. Similarly, one would expect the grounded throwers to experience less or no loss in the system's vertical velocity during release. Film analysis data (Dapena & Anderst, 1997) have shown that throwers who executed a grounded release, do not experience, on average, any loss of vertical velocity before release. Paradoxically though, the absolute magnitude of the vertical velocity of the system's center of mass was **smaller** in the grounded release throwers than in the airborne release throwers. Even though the grounded release throwers did not experience any loss in vertical velocity, they simply never reached the velocity of the airborne release throwers.

the system's (thrower+discus) vertical velocity to the velocity of the discus itself during the last quarter of a turn of the discus, it was found that during airborne release, the contribution of the system to the velocity of the discus was larger (average velocity during the last quarter turn of 1.5 m/sec.) than the actual vertical velocity of the system at release (1.4 m/sec.). During grounded release, the contribution of the system to the velocity of the discus was smaller (average velocity during the last quarter turn of 1.1 m/sec) than the actual vertical velocity of the system at release (1.2 m/sec.). From this information one can conclude that in the airborne release throws, the throwers were slowing down prior to release, from an average of 1.5 to 1.4 m/sec., which makes this method of release look bad. On the other hand, the grounded release throwers experienced an increase in the system's velocity prior to release from an average of 1.1 to 1.2 m/sec., which makes this method of release look good. However, in the final analysis the airborne release throwers were traveling upward faster in the last quarter turn than the ground-release throwers and this is what counts (an average of 1.5 m/sec. versus an average of 1.1 m/sec). In other words, although the airborne release throwers were decelerating just before release, the average velocity of the center of mass was so great that they eventually had quite a bit left in them and they reached a higher center of mass velocity at the moment of release as compared to the grounded release throwers (1.4 m/sec., compared to 1.2 m/sec.).

The height of the center of mass at the time of release had an average value of 1.09 meters in the grounded release throwers and represented 59.6% of the throwers' standing height. In the airborne release throwers, at the moment the feet lost contact with the ground, that value was slightly higher, at 1.10 meters, representing 57.9% of the throwers' standing height. It was even higher at the moment of the discus release with a value of 1.15 m., representing 60.3% of the standing height. Those numbers imply that a higher position of the center of mass at release will bring about a higher height of the discus at the same moment. Indeed, the discus at the moment of release was at a height corresponding to an average of 86% of standing height in the grounded release throwers while the same value was at 90.5% in the airborne release throwers. In absolute terms, (i.e., taking into consideration the average standing height of the throwers studied), this meant a difference of 9 centimeters between the two methods of release discussed here. For a given velocity and angle of release of a projectile, a higher release height will produce a longer distance.

There is a strong suggestion then that the airborne release

method allows for both a higher height of the discus at release and a larger vertical speed of the system, as compared to the grounded release method. Consequently, the airborne release method of release may better help the vertical velocity of the system's center of mass to contribute to the vertical speed of the discus than the grounded release method. What then may be the actual difference, distance wise, between the two methods? The height difference of 9 cm., discussed earlier, will result in the trivial advantage of about 0.15 meters of the airborne release over the grounded release.

To assess the differences due to the system's vertical velocity at release, one should consider the average vertical speed of the discus itself at release. That was found to be at 13.6 m/sec. As discussed above, the difference between the two methods in their contribution to the vertical velocity of the discus was 0.4 m/sec (1.5 - 1.1 m/sec.). That difference then is approximately 3% (0.4 / 13.6) of the total vertical velocity. Ignoring aerodynamic forces, that 3% loss in the vertical velocity of the discus in the grounded release throwers will result in a gain, of the airborne release over the grounded release method, of approximately 3% of the distance thrown and that would be approximately 1.75 meters for a 60-meter throw. If we took into consideration the aerodynamic forces, the gain would generally be smaller and it would fluctuate between 1.00 and 1.75 meters, depending upon the velocity of the wind.

Angular Momentum About the Vertical Axis (Horizontal Velocity)

A popular argument as to why a discus thrower should release the discus from a "grounded" position is that which comes from Newton's third law of motion which simply states that: for every action, there is an equal and opposite reaction. At least theoretically then, one can claim that as the discus thrower loses contact with the ground, from that moment on not much additional "energy" can be transferred to the implement. The thrower cannot push against the ground any longer and while she is in the air, the discus will react and this reaction will *tend* to make the thrower move backwards and downwards. Of course the thrower eventually will be able to move herself and the discus forward and upwards, but that will be due to the large difference in mass between the thrower and the discus. An implication of the action-reaction principle, which is at the same time an argument against an airborne release, is that of the effective transfer of angular momentum about the vertical axis (horizontal velocity) from the body of the thrower to the implement, an action that requires longer

ground support. This is another factor to consider as one evaluates the potential advantages and disadvantages of the two methods of release.

In discus throwing about 6% of the horizontal velocity of the discus at release is due to the forward motion of the center of mass of the thrower+discus system, while the remaining 94% is due to the horizontal motion of the discus in respect to the system's center of mass which is essentially determined by the angular momentum of the discus about the vertical axis (see figure 1. For a more detailed

discussion regarding momentum in discus throwing see, Dapena, 1993; 1994 or, Maheras, 2007).

Generally, the majority of the angular momentum is generated in the back of the circle as the thrower enters the turn first in double and then in single support over her left foot. At the instant the left foot takes off just before the transition to the middle of the circle, the value of the angular momentum is at about 90% of its eventual maximum value and it stays about the same up to the moment the left foot lands in the front of the circle for the initiation of the double support delivery

phase. During the double support delivery phase, there is a further increase in the angular momentum of the system (about the vertical axis) to reach the value of 100% at the moment of release. Therefore, most of the angular momentum about the vertical axis is generated in the back of the circle. Furthermore, this momentum is stored in the body of the thrower as she moves in the middle of the circle while there is very little momentum stored in the discus. Subsequently, during the final double support, there is a dramatic transfer of momentum from the thrower to the discus, which eventually expresses the horizontal velocity of the discus at release.

We saw above that there is approximately 10% of the angular momentum about the vertical axis that can be added to the system during the final double support and subsequent release. **This additional momentum is gained from the ground** and manifests itself as an increase in the total angular momentum of the thrower+discus system and may allow the thrower to better obtain the additional amount (c. 10%) of angular momentum about the vertical axis. The longer time available to the grounded release throwers (longer ground support) may give the grounded release method an advantage. If those throwers were able to transfer this additional angular momentum to the discus, that action would translate to an increase in the horizontal velocity of the discus and eventually the distance of the throw. However, we also saw earlier that the system's

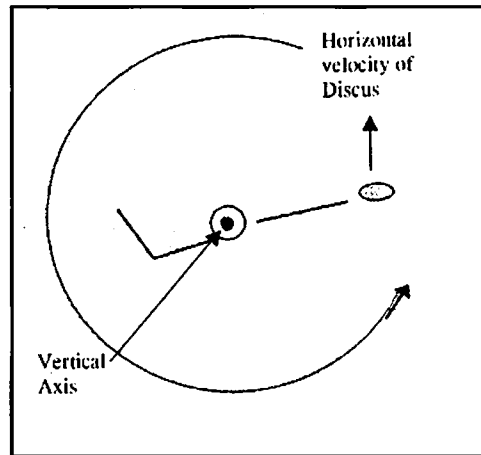


Figure 1. Angular momentum about the vertical axis (view from top).

center of mass had a slightly larger vertical velocity during the final part of the discus delivery in the airborne release than in the grounded release throws. This may have given the airborne release method an advantage. Moreover, if indeed there is an advantage of the grounded release throwers over the airborne release throwers regarding momentum, the question arises as to whether it is significant enough to compensate for the disadvantage the grounded release throwers have in the vertical velocity and direction. This may be difficult to quantify and presently we are not sure whether the airborne release method provides for an overall advantage over the grounded release, or the other way around.

Relationship Between the Horizontal and Vertical Velocity of the Center of Mass at Release

It was explained earlier that the grounded method of release may help the thrower gain greater horizontal velocity of the system's

mass at release and, that the airborne method of release may help the thrower gain greater vertical velocity of the system's center of mass at release. However, whether the thrower is

employing one or the other method of release, it is important that in general, her actions during the final double support create the conditions for optimum gains of both vertical and horizontal velocity of the center of mass at release. In this respect, the relationship between the horizontal velocity and the vertical velocity of the system at release needs to be further clarified because those two values are closely interrelated as the thrower attempts to come into contact with the ground for her final double support. More specifically, the larger the loss of horizontal velocity during the final double support, the larger the system's vertical velocity at release (Dapena & Anderst, 1997). The thrower could then basically do two things: a) she could execute a very explosive planting of the left foot on the ground (in the front of the circle) and lose a great amount of horizontal velocity while at the same time gain a great amount of vertical velocity, or b) she could execute a weaker planting of the left foot and lose a smaller amount of horizontal velocity while at the same time gain a smaller amount of vertical velocity.

Assuming that the system has a lot of horizontal velocity at the moment the left foot lands in front of the circle, the

thrower could plant the left foot very aggressively on the ground (figure 2). This action will cause the system to lose a great amount of horizontal velocity but it will also cause the system to gain a large amount of vertical velocity, which will contribute to the vertical velocity of the discus. Moreover, the loss of horizontal velocity will prevent the thrower from fouling while there will still be enough of it to contribute to the horizontal velocity of the discus.

On the other hand, if the horizontal velocity of the system at the moment the left foot lands in the front of the circle is small, the thrower will have two options (figure 3). First, she can plant the left foot explosively on the ground. This will cause the system to gain a large amount of vertical velocity, which will indeed contribute to the vertical velocity of the discus. It will also cause the system to lose a large amount of whatever little horizontal velocity it had up to that point. The result will be a limited contribution to

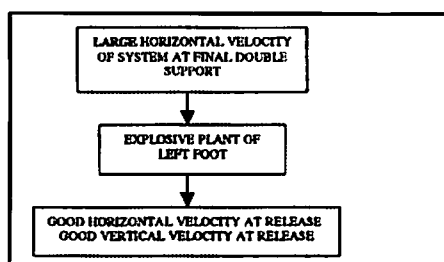


Figure 2. The horizontal and vertical velocities of the system's center of mass at release when the horizontal velocity of the system at the moment of the final double support is large.

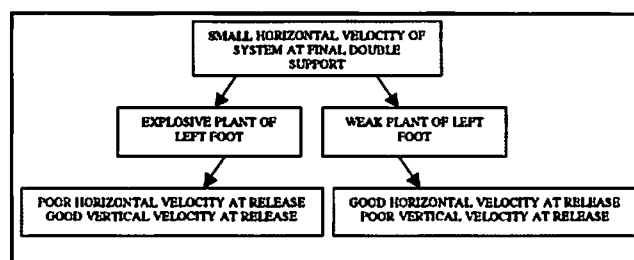


Figure 3. The horizontal and vertical velocities of the system's center of mass at release when the horizontal velocity of the system at the moment of the final double support is small.

the horizontal velocity of the discus. Secondly, she can plant the left foot in a more weak fashion on the ground. This will enable the system to keep much of its horizontal velocity, which in turn will make a significant contribution to the horizontal velocity of the discus. At the same time the system will not gain much vertical velocity and therefore its contribution to the vertical velocity of the discus will be limited. Both these options do not seem to be promising for optimum discus velocity at release.

Conclusions-Recommendations

Two main factors that determine the effectiveness of the airborne or the grounded method of the discus release are, a) the vertical velocity of the system's center of mass during the final part of the discus delivery and, b) the amount of angular momentum about the vertical axis that can be effectively transferred to the discus at release. There is a strong suggestion that the airborne release method helps the vertical velocity of the system's center of mass to make a larger contribution to the vertical velocity of the discus than the grounded release method. On the other hand, there is also a strong suggestion that the grounded release method may enable the thrower to transfer a larger amount of angular momentum to the discus

at release, thus making a larger contribution to the horizontal velocity of the discus at release than the airborne release method. At this point, it is not known which method may have a net advantage over the other. Given the importance of the magnitude of the system's horizontal and vertical velocity during the final part of the throw and also the relationship between the horizontal and the vertical velocity of the system during the same phase, we recommend that the system have a large horizontal velocity at the moment the left foot is planted on the front of the circle as the final effort is about to commence. We also recommend that the planting of the left foot is explosive so that, a) the thrower can prevent herself from fouling and, b) the system's center of mass can also attain a large vertical velocity, which will eventually contribute to the vertical velocity of the discus itself.

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TIPS & ANALYSIS OF EACH PHASE OF THE JAVELIN THROW

BY BRYAN COLLIER, WWW.THROWJAVELIN.COM

This article looks at each phase of the javelin throw to help javelin throwers get a good idea of the basic elements they should be focusing on during a typical javelin throw. You'll learn about each phase of the javelin throw including: The Running Head-On Approach Steps, Cross-Steps, Penultimate Stride, Drive Leg, Block Leg and Recovery and you'll discover tips and techniques to fine-tune each one of them.

We'll also discuss a bonus run up tip that'll help you avoid breaking down during a throw and you'll learn where the javelin is during each phase and how to choose its position to better suit your personal needs. Take your javelin throwing to the next level with this in-depth look at the phases of the javelin throw.

Phase #1: Running Head-On Approach Steps: (Typically comprised of 8-10 head on running steps while carrying the javelin overhead)

During this phase, the athlete is focusing on light, short running strides used to build up speed for the throw. This is the only phase where the athlete is going to be picking up speed. By the time you hit your cross-steps, you should be going as fast as you need to go and should simply be maintaining that speed during your cross steps.

Determining speed is a question of what speed allows you to get into the best throwing position. Go too slow and you'll lose distance and go too fast and you'll find you may not have enough time to apply enough force on the javelin. The only way to fine-tune your appropriate speed is to experiment with various speeds during practice.

As a final note, most throwers are limited by the speed of

their throwing motion. This means that the faster your throwing motion is, the faster the run-up you'll be able to use will be.

Quick points about the first phase:

- These points should be refined in practice until they're second nature.
- These are light, short, bounding steps.
- Focus on keeping the throwing arm loose and visualizing how light the javelin is.
- It's okay to keep your eyes focused on your first transition mark to your cross steps if you're a beginner. Once you improve, try to keep your eyes focused on the horizon. (In other words, this means keeping your eyes fairly low. You don't want to be looking up in the air—think, *look on a 15-degree angle up from the ground*).

Second Phase:

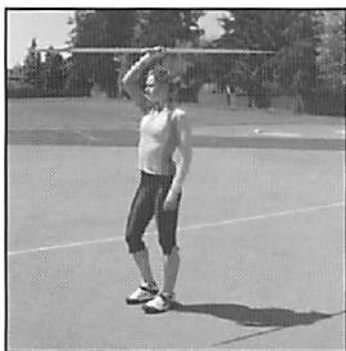
Phase #2: Cross-Steps.

You should step into your cross-steps with your foot on the non-throwing side. For example: If you're right-handed, as your left foot steps down, you withdraw the javelin as your right foot swings through to begin your first cross step. Most throwers will complete 2-3 cross-steps before they deliver the throw. Most elite throwers will shave off the third cross steps and complete 1-2 full cross steps; however, as mentioned, this is a very elite technique.

Maintain your speed: As discussed earlier, your cross-steps should not be faster than your last running steps. They should simply be the same speed. So, now you've built up speed with your first phase and you're just going to maintain the speed you've built up during your cross-steps.

Find the right angle: Your cross-steps will put you on a slight angle. As your cross-steps begin, your body will turn slightly to the side the javelin is on. If we use your hips as a guide, you should be maintaining your hips on no more than a 45-degree angle from the direction of the throw.

Your feet are also of concern during your cross-steps. They should also never be turned away more than a 45-degrees from the direction of the throw. The thrower in this picture has about the most amount of turn you'd want from your feet. His hips are probably about 40 degrees open from the direction of the throw. Aim for this position or slightly shallower from there and you can't go wrong. Some throwers will have their hips turned as little as 20 degrees from the direction of the throw. Now keep in mind that the upper body can turn much more away from the



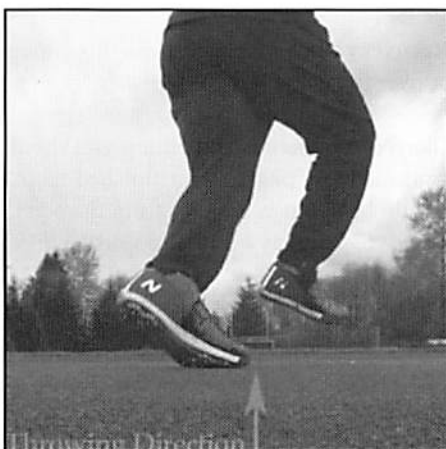
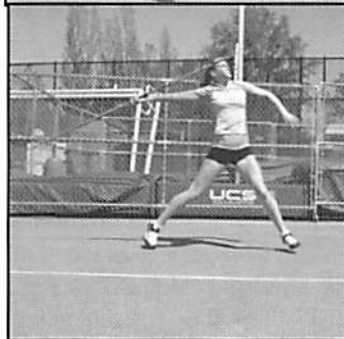
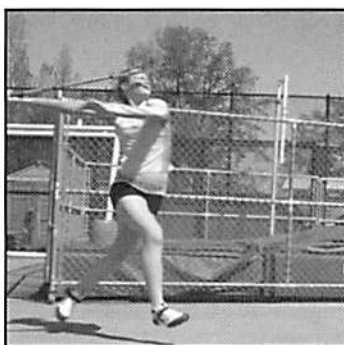
direction of the throw. We're trying to create separation between the upper and lower body so you may find that it's a good idea to have the hips on an angle more shallow than 45-degrees; whereas, your upper body may be turned over 90-degrees from the original head-on position you began the throw in.

Maintain good rhythm: Though it's more challenging to keep smooth during the cross-steps, they should still be very rhythmic and you shouldn't be breaking down between them. If you're collapsing between each cross-step, you need to shorten them until you increase your leg power so that you can handle a larger, faster stride that covers more distance.

Use your front arm: As your cross steps get going, use your front arm to set the rhythm. It should be like a conductor's arm perfectly controlling the pace and the rhythm of each cross-step. Use it vigilantly during your cross-steps and from then on for the rest of the phases of your throw.

Cross-Step Quick Points:

- Maintain the speed you built up during the first phase—don't try to go faster
- Allow your hips to angle away from the direction of the throw up to 45 degrees
- Maintain good rhythm and don't break down between each cross-step
- Use your front arm like a conductor to set the rhythm and timing of your cross-steps



Phase #3: Penultimate Stride.

The penultimate stride is the last step of your cross-steps. It's more powerful and pronounced to allow you to land both feet in quicker succession as you throw. If you're right-handed, your penultimate stride would be performed with your left foot. Thus, you would be pushing off of your left foot to land on your right foot (your drive leg) and then your left leg once again (your block leg).

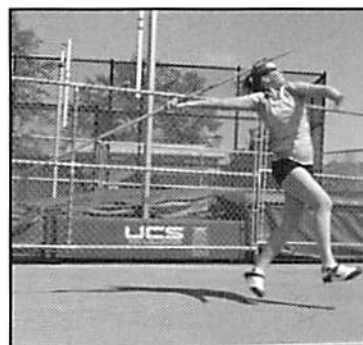
Make sure you focus on going forward during your penultimate stride and not up. Don't go up at all. This is misuse of physics that will have a detrimental effect on your throwing position and the distance you throw. Think of this stride as a longer forward stride and you'll be fine.

Phase #4: Delivery: Drive leg and block leg - Drive Leg:

As you land on your drive leg, your drive leg foot should be turned out no more than 45 degrees to the side. Any more than that and you lose muscle recruitment potential—not good. You should also not be sinking on your drive leg unless you're a beginner in which case this is normal and will naturally refine itself over time. As a side note, your entire run up should be done in an ever so slightly “loaded leg position.” If your legs are perfectly straight, you can't extend them into the throw so make sure your drive leg is bent an inch or two and “loaded” when you land on it so it has something to drive the hips forward with into the throw.

Keep your drive leg knee inside your drive leg foot. Your knee should either be over your or just inside your drive leg foot line. You cannot apply power with your drive leg unless your knee is in this position. Though most throwers have good drive leg knee position, this can happen and it's an easy fix so take a look and make sure your knee isn't “floating wide” when you land on your drive leg.

Make sure your drive leg hip turns all the way through. Your drive leg hip should turn right through the throw to the point that you feel your drive leg hip finish into your block leg side. This is best understood by watching video. Compare your hip finishing point to that of top throwers.





You'll notice that the drive leg hip of top throwers will turn over so much that their ankle will roll over as they complete their throw. Don't try to roll your ankle over as this occurs naturally from the hip. Just focus on driving the drive leg hip all the way

through and into the throw.

Block Leg:

There's a belief that your block leg needs to lock out when you use it during a given throw. This belief is somewhat true in that you block leg will fully lock out eventually but when you first put it down, just allow it to land in its natural position (slightly bent). As you deliver the throw and travel up and through your block leg, it will lock out naturally. The key point here is that you can't get any energy out of an already locked out block when you first land on it, so make sure you're not trying to land on a locked block leg.

If you're getting a lot of torque out of each throw, you may find you get sensations from your block leg, such as your toes pressing up against the front of your shoe or your block leg cleat tearing the track upon delivery. These are actually good signs and pay them no concern as in most cases, it's good if you're noticing either of them.

Bonus Run-up tip: If you're a beginner, even an intermediate, it may serve you well to run down the "non-javelin carry" side of the run up. In other words, if you're right-handed, run down the left-hand side of the run-up. This will force you to "open up" and direct all of your power into the javelin on the javelin carrying side. This also helps throwers avoid collapsing their block because they can't get outside of it on the wrong side because they're essentially "held in" by the boundary line of the run up. As always, give this a try in practice and see how it treats you.

Where's the javelin during all this?

During phase #1, the javelin should be comfortably carried with about a 90-degree bend in the thrower's arm so that the spear rides about 6 inches above the thrower's head.

As the thrower transitions into phase #2 to begin their cross-steps, the javelin should be brought back into throwing position by simply extending the throwing arm comfortably back. Keep in mind you don't need to crank your throwing arm back. It should just be comfortably extended.

Keep the javelin on a fairly shallow angle. You don't want the spear to be pointing way up in the air, which could cause you to throw on too high of an angle or bang the tail upon release.

As far as where to rest the tip of the javelin, it's again somewhat of a preference. Once you do pick a place to rest the tip after beginning your cross-steps, it should stay there basically until you release it (the javelin will naturally migrate away from its tip resting position as you begin to throw it).

Though most throwers rest the tip of the javelin just above their eyebrow, some prefer to have the javelin rest slightly lower such as chin height. Resting the javelin lower will help throwers that are typically struggling with getting their body or their hips "into the throw." The lower resting position creates the sensation of having to power the javelin with the legs as well as the arm. Top throwers use the brow and chin positions and this is again something that you need to experiment with during practice to see which position helps you achieve the best overall delivery.

Recovery phase: I can't stress this enough: Don't step on or over the white line (ha).

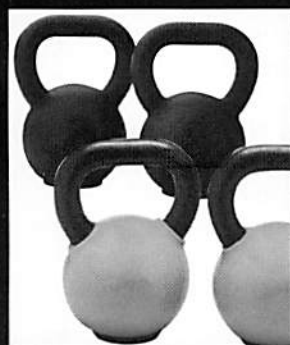
Okay, okay, there is something you should know about your recovery phase. Your finished recovery position should be about ½ a meter from the scratch line. As you improve, you may be able to finish a bit closer to the scratch line, however, expect it to take a little time before you're only sacrificing less than a foot on each and every throw. In the meantime, try to aim for about a ½ meter of leftover track between you and the scratch line at the end of your recovery phase after you've released the javelin.

Keep in mind that every track and every city and pretty much every day will affect your run-up length even if you're not trying to go any faster. Make sure you test your run-up during warm-up before your competition starts to adjust for all of these factors to avoid faulting a throw.

Byron Collyer, a.k.a. "Chucker," is the Founder of www.throwjavelin.com.

Byron was regarded as one of the best athletes in his province and claimed big titles early on in his throwing career such as the Canadian Juvenile Championships at the age of 17.

*Byron is a published authority on training for javelin. His intense interest in training techniques such as advanced biomechanics, core training, high-performance conditioning and more have helped him develop the ability to bring about rapid improvements among the throwers he works with. *L&S**



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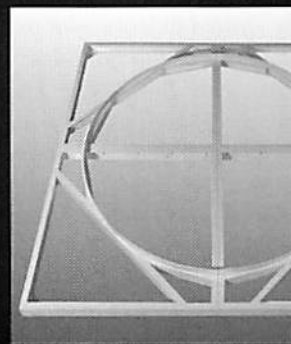
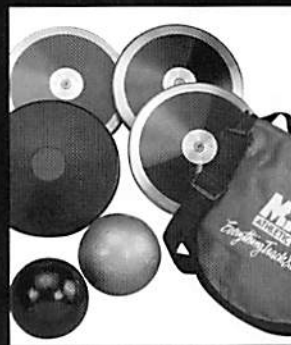
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MIKE JUDGE

By LANE C. DOWELL

Hal Connolly, the last Hammer Throw Gold Medalist from the USA, has labored tirelessly to promote a renaissance of the ball and wire in America. The Melbourne Olympian gold medalist has spearheaded a movement that is beginning to bear fruit in his native land, and he is one of the first to give credit to the many that have a deep-seated passion for this unique event.

The venerable Connolly has this to say about one of America's very finest hammer mentors. "I first became directly involved with Mike Judge's Throw One Deep throws club in 2003 when I visited his training facility in Marietta, Georgia. Since that time, he has continued to be an invaluable asset and motivator for the countless youngsters he has coached to higher levels of personal achievement, self-confidence, and college athletic scholarships. Mike and his Throw One Deep Club is a national model for what one selfless, dedicated, knowledgeable coach can do to advance youth hammer throwing performance standards in the United States."

Who would know better than one of Uncle Sam's all-time best?

Jake Dunkleberger is an American hammer star on the rise. The big guy from Auburn gives Coach Judge credit for much more than just teaching him the rudiments of the ball and wire. "There are lots of kids that have talent and some that do not. Mike is able to show those kids that have talent how to refine it and those that don't how to find it. That has been my experience with Mike. When he started to work with me, I did not want to go to his practices. I was 17 and had better things to do. If it was not for Mike, I would not have ended up throwing the hammer in high school and maybe college. He was able to reach through my know-it-all attitude, and give me a real dose of reality. Mike helped get my attitude right and ready for a big-time college program."

We have interspersed additional comments from some of America's most noted hammer aficionados throughout the body of this article. If any would ever doubt the

motivation, passion, and work ethic of this man who is dedicated to our youth and the restoration of the USA as a hammer power, read on. Granted, Mike Judge is no ordinary coach.

Long & Strong: *Where did you acquire your passion for the hammer?*

Mike Judge: I have equal passion for all throwing events. As a club, we have more success in **the hammer**, because the kids find that it is the **most fun of the throwing events**. They will work hard on what they like to do. After learning the event, I find most of my shot/discus throwers enjoy the hammer the most. In our club, our best hammer throwers are also good in at least one other event. **Allison Horner** is the national leader in the hammer. Allison is a two-time Georgia high school shot put champion.

Lauren Chambers, the #2 high school hammer thrower, was indoor national champion in the shot put with a throw of just over 49'. **Wes Wright** has thrown 219' in the hammer and 81' 7" in the weight. Wes is a three-time Georgia Shot Put Champion with a best of 63' 3". Wes has also thrown the discus 181' 11"



Coach Mike Judge overseeing the 2008 Throw 1 Deep throws camp.

L&S: *Did you fight a battle to gain acceptance for your program in Georgia?*

MJ: No, I found a place where we could throw and just started throwing. Georgia is a football state. Football is number 1, so finding a field where they did not play or practice football was the key. My program is accepted, because of **our success in**

getting kids college scholarships. We are up to 67 in the last 9 years.

Every senior that has finished with our club has received a college scholarship.

Now a throws coach at the University of Oregon, hammer throw silver medalist at the 1996 Olympic Games, **Lance Deal**, comments on Mike Judge. "From my observations and conversations with him, I think that Mike is a very

passionate coach who cares about his athletes. He is very well versed in the training and technical aspects of the throws that he coaches. He has created a very strong training atmosphere that benefits both the athletes he works with and the sport in general.”

L&S: Do you reach out to other coaches around your state with coaching clinics etc.?

MJ: Yes, I have been **teaching USATF coaches education clinics for 10 years.** I teach two USATF Level 1 coaches education clinics in Georgia each year. I teach a USATF Level 2 coaches education clinic every summer. I am very open and let coaches from all over observe my practices.

L&S: What are the requirements to become part of Throw 1 Deep?

MJ: In the past I have let anyone that has wanted to throw with us join the club. Since we have done so well in recent years, we now have a waiting list. I am trying to keep the club under 30 kids. Currently, my waiting list is at least that long.

Last year when track season started in Georgia, I had 21 contacts from girls to join and 18 from guys. By that time our club was at the maximum that I could coach. I had to say no to everyone that wanted to throw with us only during track season. **The kids in our club throw all year.** We do not put the implements down after the season, and pick them up when the season starts.

Hank Kraychir, former record-setting thrower at the University of Southern California who has coached some pretty fair young hammer throwers, says, “I do not know Mike Judge personally, but, of course, I respect what he has done for the high school hammer and weight throw. Upon reflection, his program is perhaps one of two programs that truly promotes high school hammer without the family attachment. Unlike other regional efforts, in New York, Washington, and Califor-

nia, the Georgia throwers are truly a club. Judge’s program has a longevity component, which the family related program doesn’t really have. It is a program that is designed to be a revolving door for new athletes and older athletes to return and help the younger ones, similar to the European model.”

L&S: Coach, in Washington, one of our biggest selling points in an attempt to legitimize the event in the eyes of the “doubters,” is the great opportunity for kids to further their education. Is this a general talking point for you?

MJ: I let the politicians fight the battles and spend my time coaching. I agree that it is a great opportunity, and we take full advantage of it. I do what I feel I am good at. I am good at coaching, so I coach. I feel it is not my place to force the hammer on the state of Georgia. The kids that want to throw contact me, and they do it voluntarily. I do not feel that the hammer will ever be a state-sponsored event in Georgia.

L&S: Talk about your growth as a coach since you began Throw 1 Deep.

MJ: I try to grow as a coach every year. I speak at many clinics throughout the USA, and I listen to the other speakers to learn things they have been successful doing. If I can leave each clinic with one new idea, I know I have helped my club. I have been fortunate to coach a world-class discus thrower, and that has allowed me access to the USATF elite coaches’ clinics the past 5 years. These clinics are top notch, and you can learn new information from many top coaches.



Out with the old National prep champion Allison Horner working throwing at the old circle (upper left) and at the brand new hammer cage (lower left), complete with seating for 100.

Former American Record holder and successful coach at Ashland in Ohio, **Jud Logan**, feels strongly about the effort Coach Judge makes for our nation's youth hammer throwers in Georgia. "I have had an opportunity to visit Mike at his facility and was truly amazed at not only the number of high school kids throwing the hammer, but at their technical proficiency. He has created a buzz and his kids are going on to be fine collegiate competitors. His grassroots approach is crucial to the long term success of USA throwing."

L&S: Can you give us a brief review of the development of the program and the changes you made that helped it grow?

MJ: In 2007 our club became a federal non-profit 501c3. That has helped tremendously. We have had some very generous donations. With these donations I have been able to buy the implements we need to practice and take kids who previously could not afford to travel to meets.

Last year, I started bringing in top coaches for one-day free clinics for the kids. We had a free clinic on the hammer and on the javelin.

This year I would like to do three or four of them. I like to expose my kids to other ideas. When they go to college, many things will change, so I give them an opportunity to be exposed to other top coaches around the USA.

In 2008 we put in a new facility. We have the nicest hammer facility in the southeastern USA. We have a 65' x 45' concrete pad with a world class cage surrounding it. Around the cage, we have stadium seating for about 100. This was donated to us by a local general contractor. We owe a lot to people like this. I can't thank our donors enough.

We started the club in 1998. This season was our 10th anniversary. In ten years we have had 94 high school All-Americans (includes Nike Indoors and Nike Outdoors only), 11 high school NATIONAL champions, 17 high school national runner-ups, five national class record holders, 34 state champions and 25 state runners-ups.

Last year, **Jake Dunkleberger** was NCAA Hammer champion at Auburn. Jake thought he was only a discus thrower in high school. I taught him the hammer at the end of his high school junior season.



The new facilities get plenty of use year-round. Interest is so high Throw 1 Deep has a membership waiting list.

This year **Ronda Gullatte** was 4th at USA Indoor Nationals in the weight throw. Ronda was a basketball player that threw the discus in high school. We had two women throw at this year's Olympic Trials in the discus, and they placed 9th and 13th out of 24. Counting Jake, our club had three throwers at the Olympic Trials in 2008.

My goal is to double that number in 2012. I am very proud of two members of our club who have become college coaches. **Jason Caruthers** will be coaching the throws this season at Kennesaw State in Georgia. Jason was with Throw 1 Deep in 2002, and was an All-American in the weight and hammer.

David Scheneck is the throws and jumps coach at Barton Community College in Kansas. Last year he coached 16 junior college All-Americans. David was the second

member of Throw 1 Deep and started in 1998. He was a high school All-American in the weight throw.



Lance Turley was a member of the national youth committee of USATF, a USATF Master Level Official, and a hammer coach in New England. The gregarious Turley offers these incites into

Mike Judge's program in the Peach State. "I think that what Mike is doing in Georgia is great. He has maintained interest in his group for I think well over 10 years. That is not easy to do with any group let alone in an event that for practical purposes is unknown."

"By bringing the hammer and weight to Georgia, he did something that I do not think he is even aware of. At a Youth Executive Board meeting just after the event was accepted into the Junior Olympics and Youth Nationals, I asked all the board members to go watch the event and then come back and tell me they were still opposed. The zone rep from Georgia watched the event, and went from being anti-hammer, to a supporter of the event at our meetings. Obviously, this is a big help in keeping the hammer in the youth program."

L&S: Mike, it is often mentioned that you have far more success with the girls than boys in your state. Is this just a coincidence?

MJ: We have had success on the guy's side, but we are clearly not as dominant as the girls. Football takes a lot of

the really good athletes away from other sports here in Georgia. In Georgia, football is sport #1. The boys have a lot of peer pressure to play football. The high school football coaches demand a lot of time not only during the season, but the other 7 months of the off season. The boys do not have a lot of time to do hammer turns!

L&S: *Coach, you have been a key cog for American youth in the institution and maintenance of a grass roots movement for the ball and wire. Will you provide some numbers that back this statement?*

MJ: The last 4 years the #1 high school female hammer thrower in the USA has been from my club. My girls have won two of the last three junior national titles. Our club has sent hammer throwers to Brazil and Poland to represent the USA the last two years.

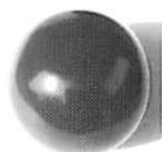
Mike's brother **Larry Judge**, coach of the American Record Holder in the Women's Hammer, Erin Gilreath, is possessed with the same characteristics that have made his brother one of our very best. We will close with Larry's assessment of Mike's program in Georgia.

"Mike has done an unbelievable job of adopting the European Model of the club system in metro Atlanta. Mike has established a specialty club so throwers from the Atlanta region have a place to get specialized coaching. This type of system is the norm internationally but in this country most athletes work with their high school program and may not be able to get the kind of coaching a throws specialist can give. Mike's training program is

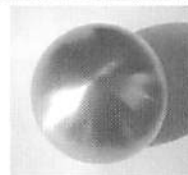
second to none. Since the beginning of Mike's club, his athletes have dominated the state of Georgia in the shot put and discus. Mike has really helped the development of the hammer and weight throw in the United States. Most athletes in Georgia had never seen a hammer or weight before they met Mike. Mike has opened their eyes to many new possibilities they did not know existed. Mike has started athletes at a young age and developed them by teaching them a solid technical model which has allowed them to reach elite levels as a high school and collegiate thrower. He has revitalized the youth movement in throwing in this country. He has also trained many javelin throwers, which is not an event contested in the state of Georgia.

The training environment that Mike has developed is unbelievable. His athletes are all very motivated and come to practice each day ready to work hard and get better. One of Mike's biggest strengths is his ability to motivate. Every athlete in Throw 1 Deep, understands their position in the club. Mike instills a greater sense of purpose in each athlete. They are always trying to improve and be the best in the country. Mike does not want to just send athletes to Nationals. Mike wants Throw 1 Deep athletes to dominate and sweep all of the medals if possible. This type of motivation has really helped the sport develop and has helped countless athletes from the state of Georgia earn track and field scholarships. Track and field, and throwing, needs more coaches like Mike Judge!"

AGREED! Our hat's off to one of America's finest. Wish our kids had more like you, Coach Judge. *L&S*



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A LIFETIME IN THE GAME

BY BEAU FAY

For the past two decades, Roland Desonier has been at the helm of the men's and women's throws programs at the University of Maryland. Scores of athletes and coaches have crossed paths with Desonier over the years as he quietly yet consistently has produced success in College Park. However, few realize that Desonier was also once an All-American thrower for C.W. Post-Long Island University, where in 1988 he was inducted into the school's athletic hall of fame. Long & Strong had a chance to sit down and chat with the affable and entertaining Desonier to talk about his past throwing career as well as the future of the Maryland throws program.

Long & Strong: *How did you get involved in throwing?*

Roland Desonier: It's funny, I was more of a football and baseball player and as a freshman in HS my mom told me I couldn't play baseball because I didn't have good grades. Halfway through the outdoor season, the track coach came to me and said "Desonier, I want to see you out at the circle today!" I didn't even know what a circle was. I picked up a shot and didn't throw it very far, but I felt a little something that made me want to come back. And that's how it started.

L&S: *What were your best marks as a prep? Describe your high school athletic experience.*

RD: 166'7" in the discus and 54'7" in the shot put. Both of these were done with what was basically a "modified stand" technique after I suffered a bad back injury my senior year. I managed to win the County championships throwing for Bergenfield High School in Bergenfield, New Jersey. At the state level New Jersey was a throwing hotbed then as it still is today. My senior year we had four or five guys throwing the shot over 64' at the state meet.

Aside from throwing, football was my main sport. Then in the winter of my senior year, I pinned our champion heavyweight wrestler and the basketball coach told me I'd start if I came out for the team. All the coaches ended up getting together and having a "throw down" to see who'd get me, even though I knew in my mind I'd go out for track. Our head coach was also our throws coach so he won with a much better technique than the others.

L&S: *Describe your college throwing career.*

RD: I threw for C.W. Post University in Long Island and graduated in 1976 with a degree in Psychology. When I severely damaged my back my senior year of high school, Alabama and Notre Dame stopped calling for football. A guy named Roy Chernock took a chance on me and offered me a very small partial scholarship to throw at C.W. Post. When I got there, Kevin McGill had just left as the coach

but there were still a ton of great throwers who remained. I think we had 4 All-American hammer throwers there along with some great discus throwers. We had a good mix of young and old and the senior leadership really helped me get started.

L&S: *You were coached by the late Al Dawson in college. Can you describe your experiences with him?*

RD: Al Dawson was not only one of the great coaches in America; he was probably the greatest individual. I considered him like a father. Al was the master in terms of psychological coaching. If you were having a bad day or couldn't find your rhythm, he'd walk into the circle and start telling stories about being a Naval officer in the South Pacific, or he'd tell Jim Brown stories, whom he coached in high school. After about five minutes of Jim Brown stories, we'd go back into the circle and start throwing well. We only realized afterwards what he was doing. He was taking us away from the bad rhythm and helping us clear our minds to regroup. He was a phenomenal coach.

L&S: *What were your experiences as a young thrower in the 70's, which was such a golden age for throwing?*

RD: Oh the 70's... that was a time. There was a lot of stuff going on politically, musically, and and so on. It was a great mix for me. It allowed me to really have a full college experience. I worked security in the music business at night so I had a chance to see literally hundreds and hundreds of concerts. I got a chance to hang out with some rock stars and do some incredible things on top of the throws, which were my main focus.

L&S: *Wow, what rock stars did you hang out with?*

RD: Well, I can remember hanging out personally with Patti Smith backstage at one time, and Stephen Stills at another. I actually used to be the guy who held the microphone for Bruce Springsteen when he'd stage dive during his performances of "Spirit in the Night" at the Palladium. I also hung out with Richie Havens, the great folk singer from the coffee scene. I remember another concert I worked where Neil Young literally brushed by me and didn't notice because he was so spaced out on 'ludes.

Others I'd consider rock stars in Washington, DC were "The Hogs", the Redskins offensive linemen of the 80's, many of whom I knew very well. I've considered George Starke one of my closest friends for nearly 30 years.

L&S: *What were your collegiate PRs and honors?*

RD: Collegiately I threw the hammer 198'11", the discus 178'7", and the 35 lb. weight 62'10". I earned 5 Division II All-American honors and was 6th at the Division I nationals my senior year, also earning All-American.

L&S: *Growing up, what throwers did you admire?*

RD: Well of course, the great Al Oerter. Also Al Feuerbach, George Woods and Brian Oldfield. Looking across the country, Mac Wilkins who was on fire and throwing everything far. And a phenomenal competitor.

Some of my greatest experiences were walking down to my circle at C.W. Post and seeing Al Oerter show up to train. I watched every move that he made—the way he walked to the circle, the way he picked up a discus and the routine he had. I'd start throwing and wait to hear some miraculous technical advice and he'd say something like, "Nice yell!" and that's all I'd hear for two hours. Next time I'd see him I'd expect something else, but that's usually all I got.

L&S: *What kind of training techniques did you use as a young thrower?*

RD: I realized that, at only 6'1" and 222 lbs, to hang with the big boys I'd have to be technically very sound. Some days I would throw the hammer with my eyes closed to feel the ball. Harold Connolly just called me the other day and told me that he found this is a great way to throw the hammer. I was doing that back in the 70's, and I understand that the Russians are doing this today.

In those days there were no manuals, no films—almost nothing about the hammer. Al Dawson was a great shot and disc guy, but even he admitted that we were learning the hammer together. We were using a drag technique in those days where we'd wind hard and feel like we were pulling a tree trunk out of the ground. I was fortunate in my second year to be throwing around 190' and I felt like the event was a great opportunity for me. The problem was that I wasn't ready to let go of my discus. I was always having 190+ practice throws in the discus. I didn't have a great hand size or physical size so conditions had to be perfect. I was never able to fully realize my potential. The week after Nationals my senior year in 1976, the Olympic year, I fell off a motorcycle and pretty much ended my throwing career.

L&S: *How did you overcome your smaller stature?*

RD: Being one of the smaller guys around, I was always trying to add a little mass to my body. Luckily we had a system where we paid for our dining at the beginning of each semester and it was unlimited food. We'd have guys go in there and stuff their shirts with sandwiches and chocolate milks and the guys that weren't on the meal plan would be diving through windows when the cashier wasn't looking. It was a great time. We'd be feasting at night on chocolate milk, sandwiches and cake and doing everything

possible between our lifting and our eating to build enough bulk to project our projectiles a little farther.

L&S: *What was your highlight as an athlete?*

RD: There were many of them. Coming to mind is the IC4A championships my junior year, winning the discus on my last throw in a lefty crosswind against my left-handed teammate who was leading the competition. Winning a couple Penn Relays was very satisfying to me, as well.

L&S: *At what point did you decide you wanted to coach the throws? What prompted this decision?*

RD: I actually got out of track and field for about 10 years and did a variety of things. After just being an athlete for all those years, when I realized my career had come to an end, I was really trying to find myself. I went into the South and was in the oil business; I worked as an oil rigger and on a tugboat. When I was on my way back to New York, I stopped in Washington D.C. to visit my brother and never left. In order to make a living in D.C., I turned to bartending for 28 years. I also began working as a drug and alcohol counselor at an adult home, which I still do on the side. This actually allowed me to get into coaching because there was only a part-time position available at the University of Maryland in 1989 when I began.

What many people might not realize is that for my first 16 years as a coach at Maryland, I was only able to coach there two days a week while I worked my other jobs. Despite that, we had a lot of success in our program.

L&S: *You have managed to coach over 25 All-ACC throwers since your arrival in College Park. What challenges did you face working as a part-time coach?*

During those first 16 years, I wasn't able to recruit due to my status, but some of my greatest success stories were kids who were found walking around campus. Almost all of my throwers early in my career were walk-ons, and developing them became some of my greatest experiences.

Eddie Condon was a pole vaulter who became a 60-foot weight thrower. Heather Atkinson was a softball player who quit the softball team to win 3 ACC championships. Ruth Kura came to me as a broken down shot putter looking for a second event. She became a 67' weight thrower who was ranked 4th in the US at the time and broke the Kenyan record in that event.

We had little Stevie Yates who at 5'9" won the Penn Relays discus title at over 181'. Ihekweba Otiji was a Nigerian soccer player who knocked on my door to try out as a sprinter and ended up being an All-ACC hammer and weight thrower. Another sprinter, Traci Ojeniyi, became a heptathlete and threw over 49' in the shot, winning ACCs. John Collins threw the weight backwards in his first meet ever only to later become All-ACC in the weight and

hammer. His roommate Beau Fay also walked on to earn All-ACC honors. These two are now competing at a high level in the Highland Games, with Collins winning the US Amateur Championships this past year.

I attribute the success of these athletes to their desire to get better and a good ability to pick up on coaching cues. Many of these athletes didn't have bad habits because they had NO habits due to lack of prior experience.

L&S: *Now that you are able to actively recruit, what do you look for?*

RD: I look for *athletes*. And a strong desire to improve.

L&S: *Do you have a general coaching philosophy? As a psychology expert, what mental approach do you stress to your athletes?*

RD: You must understand biomechanics and what it takes to throw far, but you must keep it simple. All of track and field is rhythm and timing. I stress to athletes to find their own personal rhythm. No two throwers will throw with the same technique. I'm a big believer in finding what works for the kid, both in terms of cues and physical capabilities. I don't believe in the "one size fits all" approach. Different styles work for different athletes. Also, when coaching in a meet, never offer a thrower more than one or two cues to work on or you will have a recipe for disaster.

Get strong in the fall, get explosive in the spring. Mix in the right amount of plyos, bounding, sprints, and so on. I see myself as an orchestra maestro. Bringing up the strings in the back, bringing down the horns in the front—creating a perfect symphony. Keeping that in mind, it stays fun for me. Always trying to create a symphony out of this three-dimensional art form.

L&S: *You are the longest running coach on Maryland's staff by almost 15 years. What changes have you seen in the program since your arrival in College Park? Where do you see the Maryland throws program heading?*

At one time, the track programs were almost dropped at Maryland. It was a sad situation as Maryland had won 25 consecutive ACC championships in track and field between 1955 and 1980, one of the greatest records and traditions in NCAA history.

This is one of the most storied programs in the country. Our top-10 lists in the throws alone tell the story. We had guys like Ian Pyka in the shot put, who threw almost 65 feet here as a glider. Studs like Dick Drescher and John Garvey in the discus, Al Baginski in everything. 10 guys over 240' in the old javelin with a 262' school record. Getting kids to break into these lists is what keeps me motivated as a coach.

Head Coach Andrew Valmon, now in his fifth year, has done a great job getting the alumni involved to reconnect us with that distinguished past. For our men's program he's increased our scholarship allotments so we've been able to improve our recruiting quite a bit. We are really heading in the right direction as a program and I couldn't be more excited.

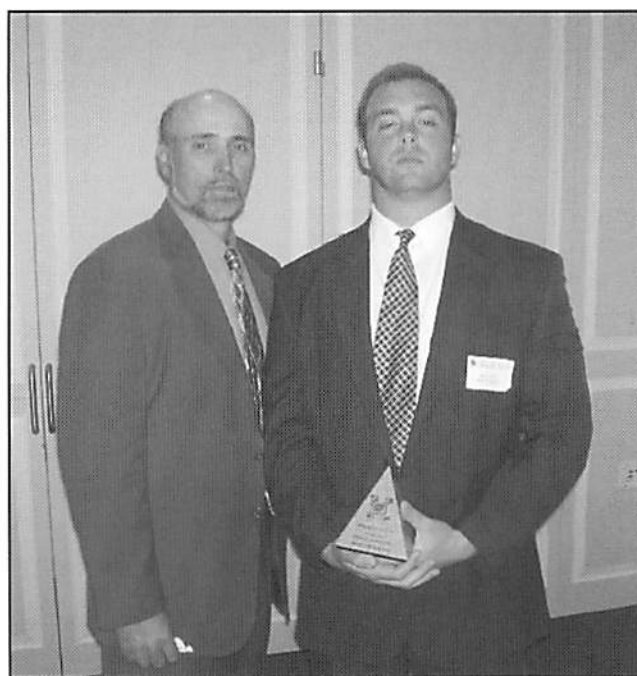
The throws program should be heading to the national level, and I'll do everything possible to make that happen.

L&S: *Do you have any advice for young throwers based on your own experiences as an athlete?*

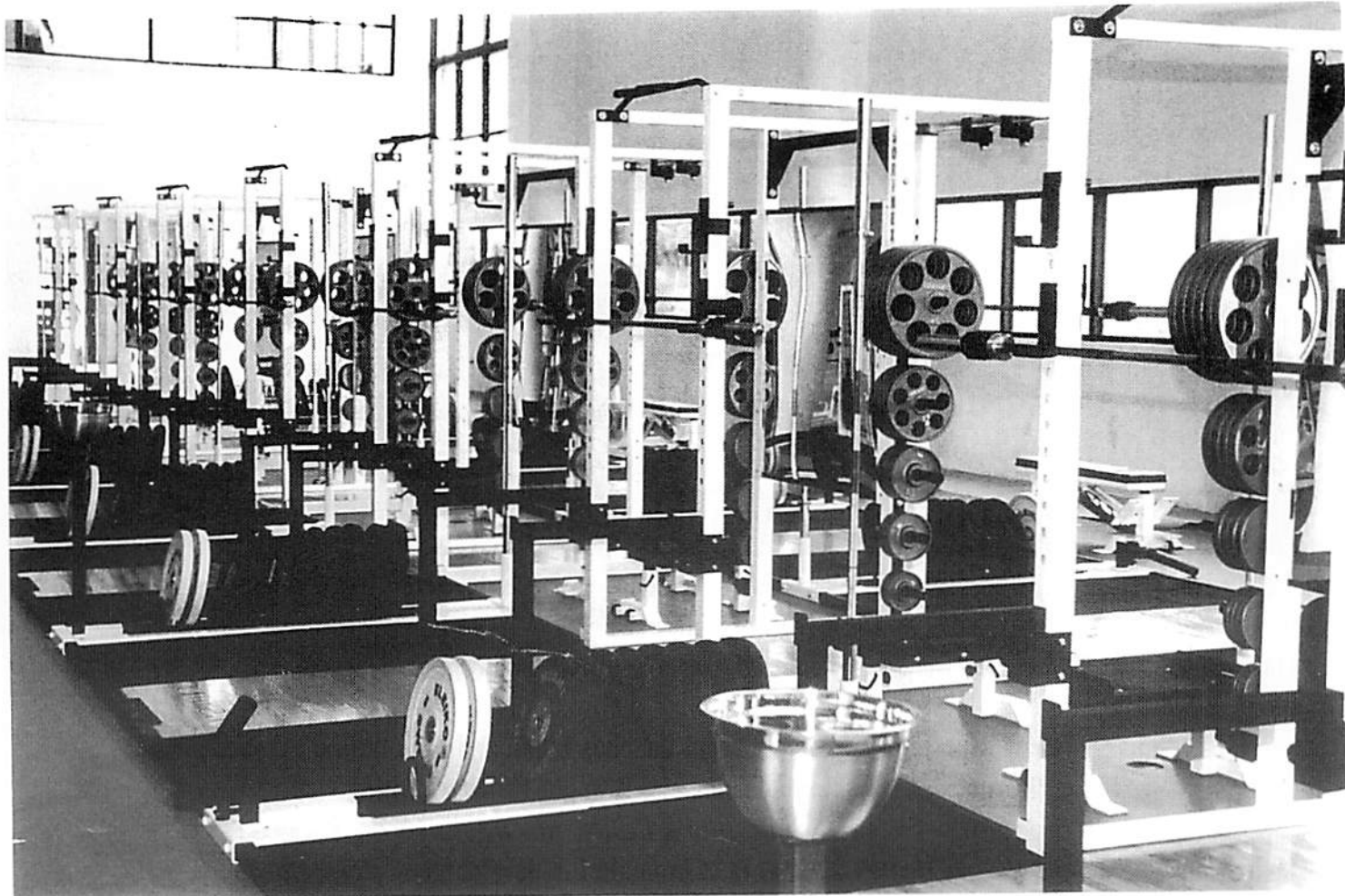
RD: Take what you need and leave the rest. Stick to a technique and work at it. I have a number of regrets from my career as a result of deviating from this mentality. My senior year I listened to an outsider who attempted to change my hammer technique because he promised me it would get me to 220' and the Olympic team. I also remember warming up at the C.W. Post Relays and having a guy tell me I was going to be the first thrower to hit 200' in the hammer and discus in the same collegiate meet. These things stuck in my head and caused me to press too hard. Just trust your technique and work at it.

L&S: *Is there anything else you'd like to add?*

RD: As a coach, I try to create a great atmosphere for learning. What really pleases me is seeing 5-10 of my former throwers showing up to our home meets year in and year out. Giving these kids an opportunity to compete at the highest level and seeing them literally become a master of their craft has been some of the most rewarding stuff for me. *L&S*



Roland Desonier (l) with author Beau Fay.



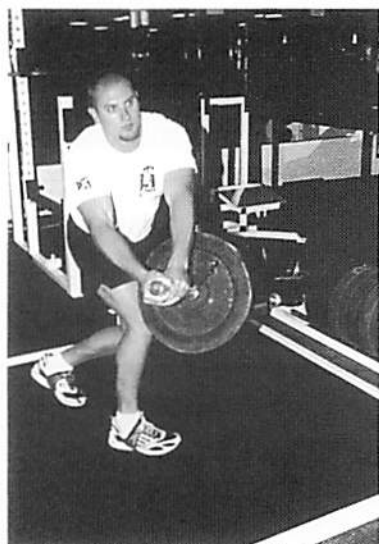
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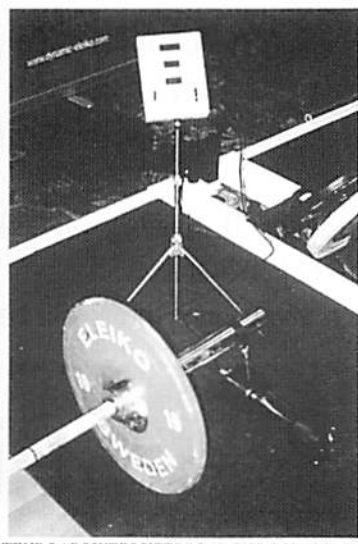
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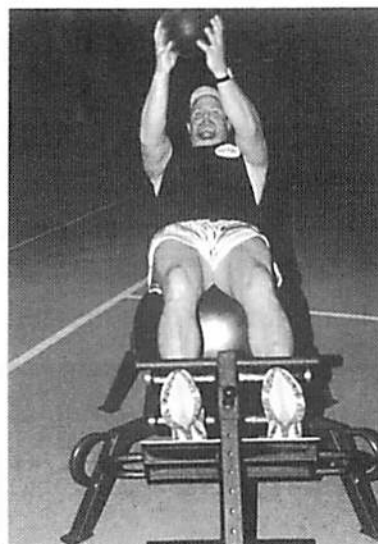
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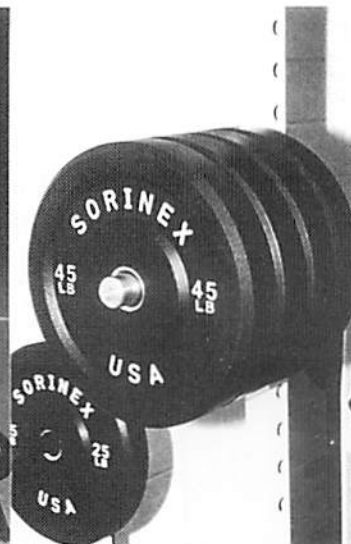
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- **KEYNOTE SPEAKERS** for the **COACHES CLINIC** will be Don Babbitt, Dr. Anatoly Bondarchuk, Tony Ciarelli, and Mac Wilkins. **INSTRUCTORS** for the **ATHLETE PRACTICE SESSIONS** will include Larry Judge (hammer/weight), Karin Smith (javelin), and Olympic shot/discus throwers Stephanie Brown-Trafton, Jarred Rome, Jason Tunks, Lieja Tunks, and Ian Waltz.
- Special events include a **DISNEYLAND®** PARK PARADE Saturday afternoon for Summit participants and America's top throwers returning from Beijing.
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- **USATF-SANCTIONED INDOOR COMPETITIONS** in the shot put and weight throw will be held on Sunday afternoon.



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