



Turns & Distances

A publication of the Officials Committee of the Pacific Association USA Track & Field
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Awards and Recognitions

The Dick Barbour

Meritorious Service Award

1985.....	Hank Patton
1986.....	George Newlon Roxanne Anderson
1987.....	Dan Dotta Del Dotta
1988.....	Harry Young Henry "Hank" Weston
1989.....	Ed Parker Harmon Brown
1990.....	Horace Crow
1991.....	(No award)
1992.....	Dick Connors
1993.....	George Kleeman
1994.....	Tom Moore
1995.....	Charlie Sheppard
1996.....	Norm Morrison
1997.....	(no award)
1998.....	John Luppés
1999.....	Richard Zulaica
2000.....	Jim Hume Jim Wynn
2001.....	Bob Shor Rick Milam
2002.....	Bob Rauch
2003.....	Lori Maynard Sonny Maynard
2004.....	Gail Wetzork
2005.....	Phil Watkins
2006.....	Bill Edgar
2007.....	Ed Hicks
2008.....	Dick Iwamiya
2009.....	Bruce Colman
2010.....	Bobby Hughey
2011.....	Don Bailes

The George Newlon

Special Recognition Award — Track

1995.....	Bob Mason
1996.....	Ben Morjig
1997.....	(no award)
1998.....	Jerry Colman
1999.....	Bobby Hughey
2000.....	Dan Davidson
2001.....	John Coie
2002.....	Gerry Collet
2003.....	Dick Iwamiya
2004.....	Rick Urband
2005.....	Joe Harper
2006.....	Richard Cabral
2007.....	Colin Campbell
2008.....	Jeannie White
2009.....	Rory Osborne
2010.....	Tiffany Banks
2011.....	Phil Leake



Charlie Sheppard (on the left) and **John Murray** were both recognized for their contributions during the Official's Hall of Fame Banquet during the 2012 USATF Convention in St. Louis. Charlie was awarded the **John Davis Humanitarian Award** and John received one of the Chairman's awards.

The **John Davis Humanitarian Award** goes to an official in "Recognition by peers for excellence and achievement by an individual who espouse through humanitarian efforts by leadership, fellowship and developmental welfare of others through USATF and its various programs." Charlie has been very active in Athletics for the Disabled and wrote a computer program to help them organize their track meets.

John Murray's **Chair's Award**, is "...Given In Recognition Of Outstanding Effort & Achievement Over The Past Year..." The inscription reads, "Through His Dedication & Leadership He Has Shown Tremendous Support Of His Committee. He Has Diligently Put Forth The Type of Effort That Helps The National Officials Committee Reach The Goals And Purposes Of Their Program."

The Horace Crowe

Special Recognition Award — Field

1995.....Sonny Maynard
1996.....Rich Zulaica
1997.....(no award)
1998.....Bill Edgar
1999.....Joan M. Wilson
2000.....Phil Watkins
2001.....Dr. Leon Glover, Jr.
2002.....Bruce Colman
2003.....Dick Petruzzi
2004.....Teddy Hayes
2005.....Shirley Connors
Margaret Sheehan
2006.....John Murray
2007.....Bill Hawkes
2008.....John Shirey
2009.....Jim Waldron
2010.....Pat Randall
2011.....**Leon Wimbley**

The Lori Maynard

Special Recognition Award

2009.....Art and Becky Klein
2010.....Deanna and Jon Vochatzer
2011.....**Keith Conning**

USATF National Award Certificate

2011

Mike Aro (Throws)
Dino Certa (Starter)
Bruce Makinson (Horizontal Jumps/Starter)
Elizabeth Price (Race Walk Judge/Lap Counting)
Jon Price (Race Walk Judge/Lap Counting)
John Wise (Starter)

2010

Robert Benoy (Horizontal Jumps)
Steve Green (Throws)
Dick Cochran (Throws)
John (J. R.) Heberle (Jumps, Starter and Electronic Measurement)
Ann Gerhardt (Race Walk and Jumps)
Leroy Milam (Clerk and Starter)

2009

Sean Laughlin (FinishLynx Operator)
John Lilygren (Vertical Jumps)
Baird Lloyd (LDR and Horizontal Jumps)
Leon Wimbley (Horizontal Jumps and electronic measurement)
Mark Youmans (Horizontal Jumps and Throws)

2008

Katherine Berman (LDR)
Richard Berman (LDR)
Derwent "Deri" Bowen (Throws)
Anthony Camargo (Competition Secretary)
Sue Murray (Throws)
Ted Waldo (Jumps and Throws)

2007

Irene Herman (LDR, Umpire)
Jeanne Sanders (Horizontal Jumps)
Mike Sands (Vertical Jumps)
Robert Thompson
Mark Winitz (LDR)

2006

Andy Anderson (Starter)
Dennis Boyle (Vertical Jumps)
Charles Des Jardins (LDR, Field Referee)
Joe Keever (Throws)
Jon Siegel (Vertical Jumps)

The Chairman's Report from the 2012 USATF Convention

by John Murray

Beginning on December 1, 2012, the rank and file of USATF met in downtown St. Louis, Missouri at the Hyatt Regency in the shadow of the Arch for the annual convention. The Pacific Association Officials' Committee, by virtue of being the largest among the 57 voting Associations, was well represented by five delegates to the National Officials' Committee, **Shirley Connors, Jim Hume, John Lilygren, Pat Randall** and myself. In addition to the usual committee meetings and general sessions, there was ample time for greeting old friends and making new acquaintances.

A highlight of the convention was the presentation, during the Hall of Fame Banquet on Friday evening, of the John C. Davis Award to **Charlie Sheppard** of the Pacific Association. The award was well deserved for Charlie's many years of service to United States Track & Field, especially toward athletes with disabilities. I am sure I speak for all Officials in congratulating Charlie. I was honored to receive a National Officials Committee 2011 Chair Award that was also presented during the Hall of Fame Banquet.

The Pacific Association lost its bid for the 2013 Junior Olympics, with the National Youth Committee selecting Greensboro, North Carolina as the site for that event. With that selection, the Junior Olympics will be staged for two years in a row on the East Coast, with Greensboro following the 2012 Junior Olympics in Baltimore, Maryland. This represents a departure from the policy of the Youth Committee in locating the Junior Olympics in the West, Central USA and the East in succeeding years. It is my hope that the National Youth Committee will reinstate this policy in order to enable Youth Athletes to have the opportunity to compete in alternating years closer to their homes, with the obvious savings in travel expense. If the sites are selected purely on the vote of each Association, the East will likely prevail since the majority of Associations are in the Eastern half of the United States.

The final general session of the National Officials Committee concluded with the posting of the Officials selected for the 2012 USATF National Championship events. Of the 500 valid applications that were received, 149 Officials, including alternates, were selected for the Olympic Team Trials, 74 for the Senior Indoor Championships, 103 for the National Junior Championships, and 18 for the Indoor Combined Events. The names and positions of those selected from the Pacific Association are set forth in another part of Turns and Distances. I want to take this opportunity to

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Pacific Association Race Walk Chair Art Klien and his race walk organizing wife **Becky**, show off the Race Walk Committee's **Outstanding Association Award** which was presented to the Pacific Association at the USATF Convention in St. Louis. Take my word for it, the glass plaque is very attractive, but does not photograph well.

commend the 29 Pacific Officials that applied for the national events and urge those who were not selected to continue to pursue the goal of working at the national championships.

Finally, for those few of us that were staying at a nearby hotel in St. Louis, we were greeted by the wail of the fire alarm at 2:15 AM on Saturday morning, followed by the arrival of fire trucks in front of the building. A call to the front desk revealed that it was a false alarm triggered by some late night revelers at the Irish pub on the main floor. However, the alarm sounded twice more during the night, which led to some significant loss of sleep. I would have anticipated some such events last year at the convention in Virginia Beach where our hotel was reported to be haunted, but not in St. Louis. In any

event, the hotel compensated us for the misfortune by removing all room charges for that night.

Mentors Needed for 2012 Officials Program

One of the things that separate the Pacific Association from most other associations is our special effort to welcome new people to officiating through our Mentor Program. Over the past four years, PA mentors have welcomed new officials. The goals of the mentoring program are to increase the number of years people continue as officials and to develop each new official more quickly as a knowledgeable and effective member of the Pacific Association of USA Track & Field.

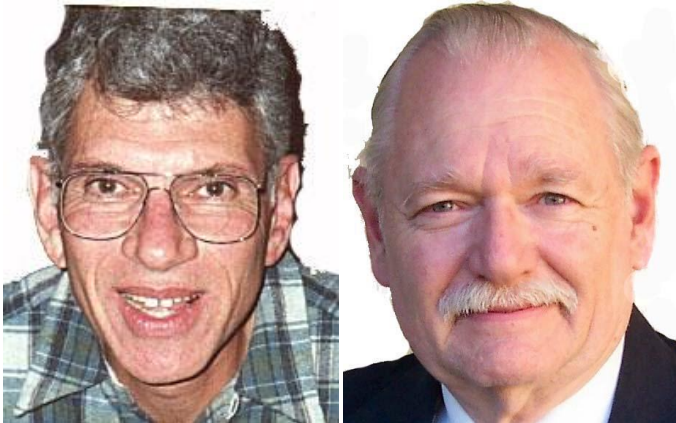
Mentoring should be considered a top priority by all National and Master level officials in the Pacific Association

If you were not a mentor last year, please consider becoming a mentor for 2012. For those who were mentors in 2011, please consider renewing your interest in mentoring for the 2012 year. Contact Dennis Boyle at dkboyle@frontiernet.net or (530) 276-1976. I would be happy to discuss becoming a mentor with you and/or send you more information on. It is a very rewarding experience.

Thanks to the following officials who served as mentors this past season:

John Bowen	Bill Hawkes	Sue Murray
Dennis Boyle	Irene Herman	Rory Osborne
Bruce Colman	Dick Iwamiya	John Pretto
Shirley Connors	Joe Keever	Pat Randall
Dan Davidson	Sonny Maynard	Margaret Sheehan
Joe Harper	Charles Murphy	Jon Siegel
		Dave Soeth

Youth honor **Bob Shor** and **Charlie Sheppard**



Bob Shor

Charlie Sheppard

The PA Youth Committee has named their April 7 meet for two long-time senior officials who have made profound contributions to the sport. The Shor-Sheppard Invitational will honor starter and youth specialist **Bob Shor**; and **Charlie Sheppard**, who served for many years as Youth's records chair as well as PA's chair for disabled athletics.

Have you renewed your USATF membership?

Your 2012 USATF membership will not expire until January 1st, but now is the time to get your 2013 membership. If you work a meet without current USATF membership, your third party insurance for meets outside of USATF sanctioned meets will not be in effect. Go to <http://pausatf.org> and **Join Now**.

Help Young Athletes Learn

Youth Committee coaches are asking officials to use early-season meets as teachable moments for youth. This means—don't simply disqualify a youth athlete in a race who runs out of the lane or passes the baton outside the zone. Explain the violation to the runner. The Youth coaches teach their kids about the lane violations and passing zone violations, but believe it really helps when the "official" (a.k.a. an expert from 25 miles away—holding a rule book!) explains the violations on a professional basis, i.e. friendly warning. Again, mentor young athletes during the early part of the season so when the championship meets roll around, the young athletes will have perfected their skills.

Heard at the track

- **Correction:** the Clinics T&D implied that Cal is holding an All Comers meet on February 25. Apologies for the error. Cal's All Comers dates are "only" January 14, February 4 and February 18. (The January 14 meet will a qualifier for the State high school indoors meet.) To work Cal All Comers—any Cal meets, really—contact **Bruce Colman**, officials coordinator, at calofficials@gmail.com.
 - **Augie Argabright**, long time Pacific Association Club coach (**San Jose Cindergals**) and more recently the head cross-country coach at San Jose State University has retired as of the end of the cross-country season. His final meet was the NCAA West Regionals at Stanford, November 12. (For more information see SJSU Athletics.com).
 - **George Kleeman** has been inducted into the Houston Marathon Hall of Fame. George was meet director for the event, 1976-1980, and competed in it from 1975 through 1978, "and a couple times before that." He remembers his best time for the course being "3:03 to 3:05," but we didn't ask which year he ran it.
- Over all, in his athletic career, George competed in twenty-plus marathons and three ultra-marathons (winning one). He was a member of the USA team that competed in the 1979 London-to-Brighton 54-mile race.

Asked by the Houston Marathon committee for his proudest achievement, George replied, "That's easy! I was the Regional VP of the National Women's Long-Distance Running Committee from 1978 through 1984 when women's long-distance running was really taking hold. I am really proud of some of the things we accomplished."

On a darker note, **George** took a fall on October 31, while working in his front yard, and broke the femur in his leg. George was put back together at Kaiser Hospital in Walnut Creek. From Kaiser, George was sent to Manor Rehabilitation Hospital, also in Walnut Creek. The latest update shows George living at home, having gone to the USATF Convention in St. Louis and he now reports himself to be freed from his walker and using a cane for support.

- **Stephanie Trafton**, the 2008 Olympic Games' Womens Discus Gold Medalist, is the new Director of Track And Field Operations at Sacramento State. Stephanie will be working with officials at. Ms. Trafton tells T&D: *"The email contact is Head Coach Kathleen Raske at raskek@saclink.csus.edu. The phone is (916) 278-7052. I usually get the information passed on from coach Raske and we confirm officials from either of us."* [Hume reports that both Stephanie and her father have signed up to become certified officials in 2012.]
- **Ron Davis** an outstanding middle distance runner at San Jose State in the 1960's, has joined the track and field staff at Cal State East Bay. Before recently returning to the Bay Area, Ron coached T&F at Ohio State, Southern Alabama, New Orleans, and

Maryland Eastern Shore and internationally. Welcome back to Northern California, coach Davis.

- Veteran Pacific Association Master Official **Bob Podkaminer** worked as an International Technical Official (ITO) at the 2011 Pan American Games recently completed in Guadalajara, Mexico. (**Joy Upshaw**, one of the Master's T&F Committee's Athletes of the Year, and a favorite of everyone around the Pacific Association, was a Women's Coach on the USA team.)
- Twenty-nine Pacific Association officials applied to work as officials at USATF championships in 2012 (including the Indoor Nationals, Indoor Combined Events, the Outdoor Junior Championships and the Olympic Trials). The following were selected:
 - ✓ Indoor Nationals...**Tiffany Banks** (Starter), **Robert Benoy** (LJ/TJ), **John Lilygren** (PV) and **Robert Rauch** (Marshal);
 - ✓ Junior Nationals...**Mark Youmans** (Clerk)
 - ✓ Indoor Combined Events...**Mark Youmans**
 - ✓ Olympic Trials...**Tiffany Banks** (Starter), **Dick Connors** (Marshal); **Shirley Connors** (LJ/TJ); **Ray Fitzhugh** (Javelin), **Teddy Hayes** (LJ/TJ), **J.R. Heberle** (Electronic Measurement),



l-r Brent Kotch (current meet director), **George Kleeman**, Pete League, founder of the race.

Charles Murphy (LJ/TJ), **John Murray** (Javelin HEAD), **Rory Osborne** (Marshal) and **John Shirey** (PV). In addition, **Bob Podkaminer** will be one of the referees and **George Kleeman** will be on the Appeals Committee.

- ✓ Three officials got a half a loaf as they were selected as alternates: Olympic Trials...**Irene Herman** (Umpire) and **Pat Randall** (HJ); Junior Nationals...**Robert Rauch** (Marshal)
- ✓ Two former members of our association were also selected. **Ted Waldo**, now residing in Southern California, was named to the Indoor Combined Events crew. **Monica Joannes**, now living in Missouri, was named to the Olympic Trials' javelin crew.



Shirley Connors **John Lilygren** **John Murray**

- During the USATF Convention in St. Louis, folks were busy with meetings, elections and catching up with old friends. Some of our officials were busy hosting four training clinics for the Officials Committee. **Shirley Connors**, a part of the Training Committee, organized the whole thing. **John Lilygren** teamed with Mike Armstrong for a clinic on setting up the vertical jump pits. John handled the pole vault. **John Murray** teamed with Len Krsak for a clinic on safety in the field events. Both played to full houses.
- When folks get together at the USATF Convention, it is a time to give out awards. This year (2011) there was a sit-down Awards Luncheon. There are seven awards which are named after our Pacific Association forebears:
 - ✓ From the Youth Committee...**The Bill Hargrove Award** to the top USATF Youth association
 - ✓ From the Sports Medicine and Science Award...**The C. Harmon Brown Award** for leadership in sports medicine

- ✓ From Men's Long Distance Running...**The Robert E. DeCelle Jr Award** for the Outstanding Male Long Distance Runner of the Year
- ✓ From the Associations Committee...**The Horace Crowe, Jr Award** for contributions to the Associations Committee
- ✓ From the Officials Committee...**The Horace Crowe Jr Award** (recognizing the contributions of a field event official), and the **Lori Maynard Award** (recognizing the contributions of a race walk official)
- **John Johnson**, former head coach at SFSU, wed Carole Bosse on December 11. The happy couple is living in Hugo, Minnesota; Coach Johnson is pursuing a career in restaurant management.
- The University of Oregon has been awarded the 2014 World Junior Track and Field Championships by the IAAF. The selection of officials to work this meet will be by the National Officials Committee's Selection Committee.
 - **Drew Wartenburg**, Director of Cross Country and Track and Field at UC Davis has added two new paid assistant coaches to his staff: **Marshall Ackley** will coach the jumps and the combined events and **Jonathan Tipton** will be coaching the throwers. Ackley comes to Davis after working as an assistant coach at the University of Oregon. Tipton found his way to Davis after working as an assistant coach at Sam Houston State in Texas. **Devin Elizondo**, a volunteer assistant coach, joined the staff to work with the cross-country staff in September and will work with distance runners during the track season. Elizondo is UCLA-trained runner with several years of high school coaching experience. (For more information go to UCD athletics .com)
- Shortly after midnight on the night of November 6th, the home of **Joe and Shirley Keever** in Los Altos was 80% destroyed by fire. Joe and Shirley escaped unhurt thanks to the sounding of a smoke alarm. The fire department thinks the blaze was caused by an electrical short circuit on the fish tank. Joe and

Shirley lost many cherished belongings and will be without a house for approximately a year. Joe's telephone number still works for those of you wishing to contact him. [Joe reports that **his golf clubs were not** damaged!]

On a brighter note: **Joe**, maintains a busy life off the track. He is a weekly volunteer at the VA Hospital in Palo Alto, a weekly volunteer at the Ronald MacDonald House in Palo Alto and

as well as an active Red Coat in the Spectator Service on the Stanford Campus.

- The track and field program at Fresno State is under siege again. The University announced Wednesday, November 9, that it will eliminate scholarships for the Men's Track and Field Program and cut more than half of the equestrian scholarships.

From Popsicle Sticks To Computer Chips (A History of Timing and Scoring the Sport of Cross Country Running) By Robert Rush

Prior to 1978 the Minerva mechanical stop watch was the method of choice to time Cross Country, Marathons and Road Races.

The Cronus 3-S LED battery-powered stop watch came in about this time. This was the first electronic stop watch with a LED display. This was a great watch for indoor events, but terribly hard to read outside in the sun. The overall method of timing remained the same.



Are you old enough to have had a mechanical stop watch? Did you have a Cronos LED stop watch?

The "tic sheet" was the method of recording all the many times of a cross country or road race. The "sheet" consisted of vertical columns listed from zero to sixty for each column. If the anticipated time of the winner was in say the twenty minute range, then the first column started at twenty minutes and each column after that was listed in one minute intervals—thus 20, 21, 22, etc.

The timing crew consisted of a crew of three officials: one timer with the running stopwatch, one recorder with a clip board and "tic sheet" and one official "tapper."

As the runners approached the finish line, the official with the stop watch would start reading off the times thus, "twenty 01, twenty 02, twenty 03 etc." If a runner crossed the line at twenty 03, the tapper would tap the recorder on the shoulder and the recorder would place a check mark in that column at 20.03 ✓. This would indicate the winner's time was 20:03.

Tic Sheet

Race Name _____ Date _____

Recorder _____ Sheet _____ of _____

[PDF Version](#)

Min:		Min:	
Sec	Sec	Sec	Sec
:00	:30	:00	:30
:01	:31	:01	:31
:02	:32	:02	:32
:03	:33	:03	:33
:04	:34	:04	:34
:05	:35	:05	:35
:06	:36	:06	:36
:07	:37	:07	:37
:08	:38	:08	:38
:09	:39	:09	:39
:10	:40	:10	:40
:11	:41	:11	:41
:12	:42	:12	:42
:13	:43	:13	:43
:14	:44	:14	:44

A "tic sheet"

As each succeeding runner came in, the timer would continue to read off the times and the "tapper" would tap the shoulder of the recorder each time a runner cross the finish line.

If a group of runners came in a same bunch, the taper would say the number of runners such as "four". The recorder would mark on the tic sheet that number in the column thus 20:04 4. The place of these runners was determined on how they were lined up in the chute.

Another official would call off the uniform color of the runners as they finish: red, yellow, blue...etc

and an official would line them up in the chute accordingly.

At the end of the chute each runner was given a stick with their place of finish printed on it. At first popsicle sticks were used.



You didn't think we would forget the popsicle stick did you?

The runners gave this stick to his coach. Using the numbers written on the popsicle sticks for his first five runners, the coach tabulated a "quick score" on a envelope and then turned that into the score table.

The final team scoring could not be officially announced until it was determined how many incomplete teams (teams with fewer than five finishers) there were and how many teams ran with more than seven runners. Some race directors only allowed a maximum of seven runners per team, eliminating this last scoring problem. You had to rely on coaches to notify race officials that they had an incomplete team. This all took time and results were often delayed for hours if not days.



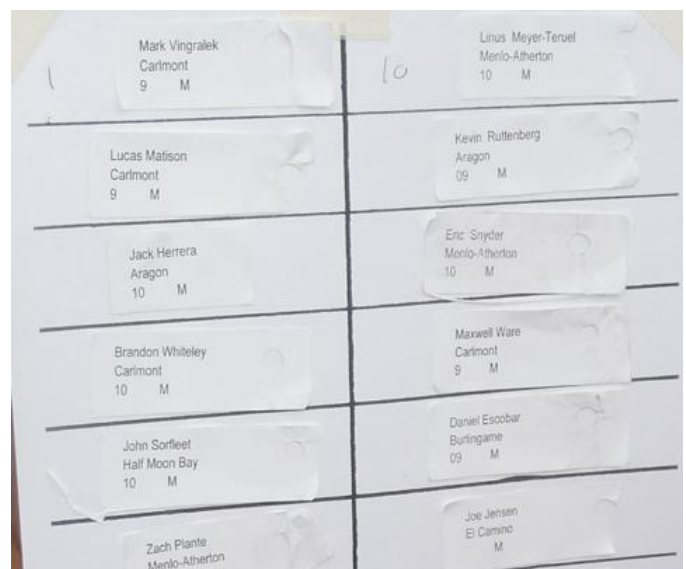
A Chronomix machine and its keypad. They are still in use today.

The popsicle sticks were replaced with tongue depressors, but the same scoring problems occurred. In 1978 several important developments came into play. This author invented the **Chronomix Timer**. This eliminated the "tic sheet" timing. Now, one Chronomix operator could punch a button for each runner who crossed the finish line. This changed cross country and road racing timing tremendously, but there were still problems. The timing was accurate but matching the time with the runner was still a challenge. Officials still had to line up the athletes in the chute and in road races, there was the "turkey". A "turkey" is a runner who jumps into a

race and doesn't pay or have a chest number. The Chronomix timer did not always have the ability to identify these "turkeys" before recording their finish time. To make it worse, some "turkeys" would cross the finish line, get timed and then duck out of the chute. This caused a domino effect on the match up of the times and runners.

About this time, cross country meet directors were experimenting with using name labels on the runners.

The runners would go in line through the chute as usual and then turn in their name tag at the end of the chute. The tags were placed on a big board and then the Chronomix tape times were matched to the runners place on the board.



Labels didn't always stick...did they?

In the early 1970's, **Alan Jones** developed software named "**Runscore**". This software could produce the overall individual scoring and automatically score teams accurately by accounting for teams with less than five or more than seven runners. A little later **Chronomix** added a data output and the times are sent directly to the computer. **Chronomix** also added a "**Select Timing**" feature. The Select Timing Keypad is connected to the timer and this information is also sent to the computer. While the **timer** records the finish of every athlete, the **select timer** enters the bib numbers of the first and last finishers and as many additional *select times* as they can do accurately. It is fortunate that cross country races are scored in full seconds, for sometimes a number of runners cross the finish line at almost the same time.



John Coie was counting runners with the Chronomix while Lisa Shrock handled the Select Times. In the background, J.R. Heberle was on the back-up Chronomix.

If the **select timer** chose, say chest number 100, when that runner shows on the computer screen, there are two columns, one column has the numbers of all the finishers, the second column has all the “select times” numbers. Chest number 100 in the runner’s column should match that chest number in the select times column. If they match, all is good. If they don’t match there could be several causes. The official timer could have missed a time or he could have hit the button an extra punch or a runner could have ducked out of the chute. The computer operator can then cause the times to match up by either adding a time or removing the extra time. This may happen several times during the race.

About this time, digital video cameras came into being. They were used as a backup to make sure the finish order was correct.

The next big breakthrough came with the innovation of the tear off barcode on the bib number. The bar codes increased the accuracy of

recording bib numbers and quickly sped up the processing of results tremendously.

Peninsula Athletic League

692

Cross Country Championships

RAINBOW RACING SYSTEM® • 800-902-1011 • www.rainbowracing.com • MADE IN THE U.S.A.

DO NOT PIN



FINISH TAG - DO NOT DETACH UNTIL IN FINISH CHUTES

Laura Lee Sullivan/12

MLTC

692



Yes, this is the same FinishLynx camera you are used to seeing at the finish line during a track race.

There was still the problem of getting the runners through the chute in the proper finish order. In some championship races more than 60 runners would come in one minute. Enter the **FinishLynx** camera and its baby brother the **IdentiLynx** camera (a camera that takes the finish picture head on).



In IdentiLynx camera is positioned behind the finish line facing the incoming runners. This picture of runners with their bib numbers showing coordinates with the FinishLynx's side view of the finish.



The "mats" which read the computer chip and send the information to the computer. Multiple "mats" are used as back-up.



The Shasta JC Girls took time out before their state championship race to model what a properly attired runner will wear with bib number and hip number.

Hip numbers that match the chest big numbers were added to each runner and the **FinishLynx** operator could verify the order of finish and make sure the order was correct on the computer screen. The addition of hip numbers for cross country was of tremendous value to the FinishLynx operator for determining order of finish.

The combination of the **Chronomix Timer**, with *select timer*, the **FinishLynx** side camera and backup front camera made timing Cross Country places and team scores basically full proof, almost.

Then enter the computer chip. The chip, worn on either the shoe with some companies having the chip integrated into the bib number, carried the same information as the bar code on the pull-off tag. A sensor rug is placed at the finish line that would send the chip data to the computer program. Sensor rugs can also be used to give unofficial times and team scores on various intervals out on the running course.



In the world of Geeks, it appears that the one with the most cords wins. To time a race with chips requires lots of power, connections and cords



*Wouldn't it be nice to have a big clock so everyone can see their time. **Sean Laughlin's** clock may not be the most photographed clock in the country, but it is right up there as athletes, parents and coaches wait for "their" name(s) to scroll by.*

For road races, wearing one chip on either shoe seemed to work fine. For cross country racing, where place is more important than time, close finishes became a problem depending on which shoe wore the chip and which foot crossed the sensor pad first. The attempt to solve this problem required a chip on both shoes. This caused a new look for the rules as to which part of the body was considered the finish, the shoe or the torso. [USATF Youth and high school rules opt for the shoe.]



Cross country shoes come in all sorts of funny styles. A computer chip will fit on most, but what if you want to run barefoot (legal in all but high school) Well, there is now a chip on a Velcro strap for that.

The chip's greatest advantage was the removal of the finish chute process. Once the runner's chip is recorded on the sensor, there is no need to keep the runners in order of finish. They proceed in what is now called the "finish corral" and when reusable chips are used, they have to be turned in before they can exit the corral.

The cost of using chips is obviously more expensive than the barcode bib method. In major championship competition, for cross country, place determination being vital, use of other backup equipment is important. The side FinishLynx camera with side hip numbers is used to determine place. In races when runners finish one tenth of a second or closer, the computers may be checked for proper place. This method of chips, side FinishLynx camera and front digital cameras is extremely accurate and is used when the rules permit.

These backup procedures are extremely important because there are still situations that can happen.

Lost chips, broken or damaged chips, can still cause problems. Bib numbers should be worn on both the back, front and side of the runners so that officials on the course and at the finish area can easily identify any runners who violate the rules.



What good is a computer chip without J. R. Heberle (top) and Sean Laughlin (bottom) as the computer operators. Note: five computers for one race.

Timing and scoring the sport of Cross Country has come of age, but I am sure there are more things to come.

About the author-Bob Rush

- Professor, Physical Education, College of San Mateo, emeritus
- Inventor of the Chronomix Timer in 1978 and the starting and timing company: **Robert Rush Sports Consultant**
- Timer of national, state, local competition. Head Bay to Breakers timer for 20 years. Timer of California State Championships for both community colleges and high schools and five national championships.
- Designed and still maintains **Crystal Springs Cross Country Course** which was built in 1971
- Ran in his first Cross Country competition in 1951
- Coach of high school and college Cross Country and Track in California for 40 years.
- Member of the California Community College Track and Cross Country Coaches Hall of Fame, the San

Mateo High School Sports Hall of Fame and the College of San Mateo Sports Hall of Fame.

Have you signed up for your training clinic? Have you ordered your new rule books?

- If you have a question about the clinics, send Training Chair Shirley Connors an e-mail at SocTnF@att.net
- If you can't find your last issue of Turns & Distances (The Clinic Version) send me an e-mail at jimhume.certchair@sbcglobal.net and I will send you another copy.
- The answers for your 2013 ReCert tests (yes, they are now called tests) will come from the 2012 rule books. Get your new USATF and High School books now. The NCAA book is good for 2011/2012...no need to buy a new one. Avoid the rush!
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The original version of a Chronomix.



American River's Men's Cross Country team won the State Community College Cross Country

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